

EXT. SARSÆ
JAM. CO.
EXT. SARSÆ
JAM. SIMP.
EXT. SARSÆ
JAM. LIQ.
DEC. SARSÆ
JAM. SIMP. 1-7.
DEC. SARSÆ
JAM. COMP. 1-7.
ALL FROM FINEST RED
JAMAICA
SARSAPARILLA ROOT
PREPARED IN VACUO BY
SPECIAL PROCESS.

FINEST SOLUBLE
ESSENCES
OF LEMON, GINGER,
GINGER ALE (BELFAST),
ORANGE CHAMPAGNE,
KOLA CHAMPAGNE,
AND SEVERAL HUNDRED OTHERS.

PURE
CONCENTRATED
FRUIT ESSENCES
OF THE FINEST QUALITY
AND
HIGHEST DEGREE OF
CONCENTRATION.

STEVENSON & HOWELL'S SPECIALITIES.

◆
STANDARD

VACUUM-PREPARED

JAMAICA SARSAPARILLA

PREPARATIONS

◆
ESSENTIAL OILS

OF GUARANTEED PURITY

◆
PURE ESSENCES

— OF EVERY DESCRIPTION —

— SAMPLES, QUOTATIONS, AND FULLEST DIRECTIONS —

FOR USE UPON APPLICATION.

ESSENTIAL OILS

OF GUARANTEED PURITY
AND
EXCEPTIONAL QUALITY.

ALMONDS
ANISEED
BERGAMOT
CARAWAY
CHAMOMILE
CARDAMOMS
CASCARILLA
CASSIA
CEDAR-WOOD
CINNAMON
CITRONELLA
CLOVES
CORIANDER
CUBEBS
EUCALYPTUS GLOBULUS
GERANIUM
GINGER
HOPS
JUNIPER
LAVENDER
LEMON
LIMES
NEROLI
NUTMEGS
ORANGE, SWEET
ORANGE, BITTER
OTTO OF ROSE
PATCHOULI
PEPPERMINT
PETIT-GRAIN
PIMENTO
ROSEMARY
SANDAL WOOD
SASSAFRAS
SPEARMINT
TANGERINE
THYME
WINTERGREEN
YLANG-YLANG

&c. &c. &c. &c.

**STANDARD WORKS, 95^A SOUTHWARK ST., LONDON, S.E.
AND 128 HOPE STREET, GLASGOW.**

THE PROPRIETOR OF WOODWARD'S "GRIPE WATER,"

In consequence of the recent proceedings in the Chlorodyne case, desires to assure all CHEMISTS, STORES, GROCERS, and all Shopkeepers generally, that his medicine contains

NO POISON,

and may be sold by anyone holding a Patent Medicine Licence without let or hindrance.

LONDON HOMOEOPATHIC HOSPITAL AND MEDICAL SCHOOL, GREAT ORMOND STREET, BLOOMSBURY W.C.

President—THE LORD ESBURY.

Contains 90 Beds, and being entirely supported by Voluntary Contributions, Donations and Annual Subscriptions are earnestly solicited. The Hospital is always open to the inspection of visitors, and Clinical Instruction is given in the Wards and Out-patient Department to Medical Students and Practitioners. It possesses a valuable Library of Homoeopathic Publications, which Medical Men are invited to study. They are also invited to visit the Dispensary. The In-patients number over 700 annually; the Out-patients nearly 9,000 annually. The number of Patients treated since the inauguration in 1850 exceeds 215,000. It has a staff of 42 Nurses for Ward Nursing and Nursing Invalids at their residences.
G. A. CROSS, *Secretary-Superintendent.*

BUYERS' GUIDE,

See pages 25—27.

MACHINE-CUT

DRIED ORANGE PEEL.

The Seville Orange season being now over, we are no longer producing the fresh cut shreds, but are still able to supply the superior quality MACHINE-CUT DRIED PEEL, which has been giving such general satisfaction to the trade.

The Peel has been cut as free from pith as possible, and every care taken in drying to preserve the colour and aroma.

Samples sent free on application.

CHARLES SOUTHWELL & CO., DOCKHEAD, S.E.

HALF PROFIT.

Tom Brooks's "SWEET SOLID PERFUMES" are having a tremendous sale, and daily growing more popular. They are always strong and sweet. Tom Brooks's "SWEET SOLID PERFUMES" must not be confounded with Frozen Perfume, as they are far and away better. Comparison invited. Six odours. Enchanting and delicious Bouquets will last for years, and mellow by age.

Retail 2d. each. Trade price, 12s. gross. Six-dozen orders, carriage paid. May be had of all Wholesale Houses.

SPECIAL NOTICE.—In order that every chemist may handle them, I will send half-dozen (assorted), post paid, for 6d.

THE LATEST USEFUL NOVELTY.

"Welcome as the flowers in May."

TOM BROOKS'S "SWEET MAY BLOSSOM,"

A New, Sweet, Disinfecting, Solid Perfume, packed in a fancy Japanese basket. The latest, sweetest, and most lasting Bouquet. Contains Eucalyptus and Pine Oils, and will retain its disinfecting properties for years.

No wardrobe should be without a basket of "Sweet May Blossom," for not only does it give forth a healthy, delicious perfume, but also prevents the ravages of moths, and is a certain germ-destroyer. It is, in fact, a grand Disinfectant and a lovely Perfume combined.

Retail Price, 6d. each; Trade, 3/8 per dozen.
Sample half-dozen box free for 2/-

TOM BROOKS, Chemist, Hornsey, LONDON, N.

N.B.—I still continue to supply Recipes, Formulas, &c., Detailed Lists Free.—See Exchange Column.

1892.

ILLUSTRATED PRICE LIST

REVISED JANUARY, 1892.

ISSUED HALF-YEARLY.

NO TRAVELLERS!

Their Expenses Given to Buyers.

DRUGGISTS' SUNDRIES.

£1 worth SUNDRIES
5 per cent. discount.

£5 worth SUNDRIES
5 per cent. discount,
and Carriage Paid* to
any Railway Station
in the United King-
dom.

PATENT MEDICINES.

SPECIAL QUOTATIONS FOR QUANTITIES

* Carriage Paid with £5 worth of
"Sundries."

LIST SENT POST FREE ON RECEIPT OF BUSINESS CARD.

COMPARE THE PRICES. SEND SAMPLE ORDER.

MAY, ROBERTS & CO., 9 Clerkenwell Road, LONDON.

WESTMINSTER COLLEGE

TRINITY SQUARE, BOROUGH, LONDON, S.E.

PRINCIPALS—MESSRS. WILLS & WOOTTON.

Entries are now being made for the Course commencing on August 2. Fee until the October Exam. (Minor or Major). £8 8s : January, £12 12s. : until quashed, £15 15s. This fee includes all books, apparatus, &c., there being no extras of any kind.

PRELIMINARY - 3 months, £3 3s. : until raised, £5 5s.

Examinations in London, April, 1892.**MAJOR**

Four students presented themselves, ALL passed.

Mr. W. H. BRIDGMAN	..	..	..	St. Albans
" J. E. H. LAMBERT	..	..	..	Holworthy
" S. SUMMERS	..	..	..	Parley
" ..	..	..	..	London

* As this gentleman only attended part of the time, we omit his name.

MINOR

Mr. T. BROWN	..	..	..	Seaham Harbour
" J. A. DAY	..	..	..	St. Albans
" H. S. DUNK	..	..	..	York
" A. E. DUPUY	..	..	..	Guernsey
" G. EGLESTON	..	..	..	Alreweas
" T. A. O. HEALE	..	..	..	Bury St. Edmunds
" C. J. HESLTON	..	..	..	Bever'ey
" G. A. JOHNSON	..	..	..	Rugby
" A. H. MURPHY	..	..	..	Saafham
" F. H. TAYLOR	..	..	..	London
" J. WALLER	..	..	..	Stanley

PRELIMINARY.

Mr. C. AMOS	..	..	..	London
" H. FFOLKES	..	..	..	London
" W. F. HEELY	..	..	..	London
" W. E. KIRKMAN	..	..	..	London
" J. J. WEBB	..	..	..	London

THREE YEARS' FREE TUITION.

WILLS' UNIVERSAL POSTAL SYSTEM

ALL APPRENTICES are advised to enter for two or three years, and lay a good foundation of knowledge.

For full particulars apply to **E. WALDEN**, Secretary.

**CONTINUED SUCCESS
OF THE
SHEFFIELD COLLEGE OF PHARMACY.**

The Short Course for the July Examination commences on the 24th May. Fee, £1 10s. No extras whatever.

Rejected Students and those who have already been through the work should join this two months' course for the July Examination and insure success. Apply early for bench. Every facility for Practical Pharmacy and Chemistry.

Send post-card for Prospectus and useful information to

Messrs. GREAVES & TURNER,
118 THE MOOR, SHEFFIELD.

THE "ECONOMIC SERIES"

Of Twelve Botanical Slides, illustrating the Arrangement of the Elementary Tissues.

Specially arranged for the use of Students in Botany and Materia Medica, and designed for instruction and reference. Each Slide is marked with its characteristic feature, so that the Student may know what to look for in his histological practice.

10s. 6d. the Set in Case complete. Free by Post.

G. T. W. NEWSHOLME, Sheffield.

JUST PUBLISHED. 200 pp., Crown 8vo. 3s. 6d.

INDIGESTION

A Manual of the Diagnosis and Modern Treatment of the different varieties of Dyspepsia.

By **GEO. HERSCHELL, M.D., LOND.**

"Any work of this character must stand comparison with a number of able monographs either in English, French, or German. We think Dr. Herschell's book will compare favourably with any of these."—*Therapeutic Gazette*, Jan., 1892.

London: **BAILLIÈRE, TINDALL & COX.**

Send For It!

My New Book: **"How I Prepare Advertisements."**

Just off the press; 80 pages; 30 illustrations; full of Ideas.

Worth a Guinea. Send the postage and you shall have it free.

Albert L. Teele, Advertising Expert,

Edingham House, Arundel Street, London, W.C.

CHEMICAL AND SCIENTIFIC APPARATUS.**J. ORME & CO.**

(Late M. JACKSON & CO.),

Manufacturers and Importers of every description of Apparatus for Lecturers or Laboratory use.

By Appointment to H.M. Hon. Board of Inland Revenue, Science and Art Department, Royal School of Mines, Trinity House, Pharmaceutical Society, &c.

ILLUSTRATED PRICE LISTS ON APPLICATION.

65 BARBICAN, LONDON, E.C.



I am writing and designing
announcements for many Adver-
tisers, and placing same in the
profitable newspapers and maga-
zines of the Country.

I also make a feature of preparing Original Illustrations and Striking Designs for circulars and pamphlets, and am in a position to quote a low figure for the production of choice printed matter. For reliable advice on how and where to advertise, address—

FREDERICK W. SEARS,
EXPERT IN PROFITABLE ADVERTISING,
138 FLEET STREET, LONDON, E.C.

BLAKE & MACKENZIE, Medical Label & General Printers SCHOOL LANE, LIVERPOOL.

We make a speciality of **MEDICAL LABEL PRINTING**, and for Good Workmanship, Neat Designs, Punctuality, and Price can compete successfully against any house in the Trade.

To Chemists who combine a **SEED TRADE** with their other business, we can supply them with every requisite suitable for that business, as we are The Largest Makers of **SEED POCKETS** in the KINGDOM.

Special attention is paid to Printing **SEED CATALOGUES**. Samples of which will be ready in November, and sent free on application.

OUR CHEMISTS' CALENDARS FOR 1892 ARE NOW READY, Designs very choice and attractive.
Apply for Samples before ordering elsewhere.

We make all descriptions of **POWDER** and other **ENVELOPES**, which are second to none for Quality and Price

CHEMISTS' STOCK LABELS OF EVERY DESCRIPTION KEPT IN STOCK

FORD, SHAPLAND & CO.

CHEMISTS' AND GENERAL PRINTERS, LITHOGRAPHERS, ENGRAVERS, &c.
6 GREAT TURNSTILE, HIGH HOLBORN, LONDON, W.C.

PICTORIAL COUNTER BILLS

ON WHITE AND ASSORTED COLOUR PAPERS,
PRINTED IN COLOURS, and Specially Designed for Chemists' Advertising.
PLEASE WRITE FOR SPECIMENS.

Price Lists, Pamphlets, Circulars, Billheads, Memorandums, Cards, and all kinds of Printing and Stationery required by Chemists, at most Moderate Prices.

AGENTS for REGISTRATION of TRADE MARKS.

FALLOWFIELD'S PHOTOGRAPHIC ANNUAL, 1891-2,

512 Pages. 680 Illustrations. 1/- Post Free. Foreign Stamps Accepted from Abroad.



OVER 300 AGENTS.

**"FACILE"
HAND CAMERA**

£3 13s. 6d. & £5 5s. complete.

DISCOUNTS TO DEALERS AND
CHEMISTS ONLY.

Winter Price List, profusely
Illustrated, Post Free.

**JONATHAN
FALLOWFIELD,**

Central Photographic Stores,
146 CHARING CROSS ROAD
LONDON.

DARTON'S IMPROVED CLINICAL THERMOMETER.

REDUCED
PRICES.



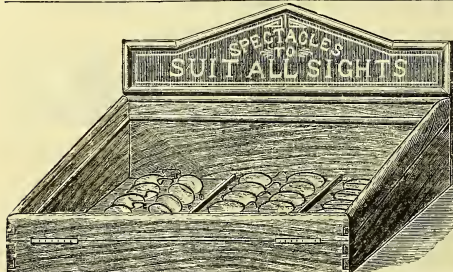
Fig. 1.

Fig. 2.

Fig. 3.

Hospital Pattern, in German Silver Cases	...	...	...	...	...	21/	per dozen
Standard do., Fig. 3	"	or Vulcanite	...	...	...	27/	"
Lens Magnifying Front, Hospital Pattern, Fig. 1, in German Silver Cases or Vulcanite	...	...	...	...	...	36/	"
Do., rapid action, by which readings can be taken in as short a time as 30 seconds, Fig. 2	...	...	...	...	...	48/	"
Kew Certificates	...	...	...	...	...	12/	doz. extra.

We beg to caution our clients against buying spurious imitations of our well-known goods.

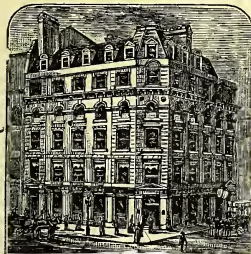


DARTON'S SHOW CASES OF SPECTACLES.

Chemists commencing the Spectacle business will find these Show Cases arranged with an assortment of Spectacles and Folders of all sights, to meet the requirements of purchasers. The quality and quantity may be varied to suit any class of trade at customer's wish. Case is of Solid Polished Mahogany, well made and finished, to stand any climate. A large Coloured Show Card is sent with each case, and instructions for testing sights, with table of Nos., and together with Sight Tester, £2 2s.; do., with assortment of Folders and Test Types, £3 3s.; Large-sized Case, with more complete assortment, £6 6s.; do., with assortment of Pebble Spectacles, £10 10s.; Large-sized do., £21.

The following Trade Lists now ready: "Spectacles and General Optics," "Meteorological Instruments," "Electric Balls. Medical Batteries, &c.," mailed Free to any part of the World.

F. DARTON & CO., (Makers to H.M. Government)
Clerkenwell Optical Works, 142 ST. JOHN STREET, LONDON, E.C.

BARCLAY & SONS, LTD.

"TIT-BIT" METAL
HAND CAMERA.

FROM 10/6 EACH. 20% Dis.

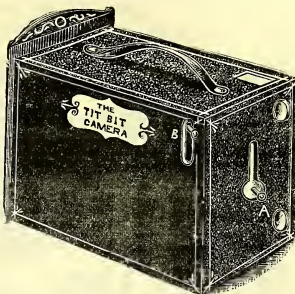
Size 5 1/2 x 4 1/2 x 5 1/2.
Weight, with slide 24 oz. only.

THE BEST YET OFFERED.

PRICES. 20% Dis.

Cloth covered, 1/4 plate, 1 Slide ..	each 10/8
Leather	" 12/8
Cloth covered, with double finders ..	" 12/8
Leather	" 15/8

95 FARRINGDON ST.,
LONDON, E.C.

**THE ART OF DISPENSING.**

This popular work treats of all the manipulative details involved in compounding medical prescriptions special attention being given to dispensing difficulties.

The Book contains 280 pages. Price 3s. 6d.; by post, 3s. 10d.

THE HANDY-BOOK OF MEDICINE STAMP DUTY.

This work has been written for us by Mr. E. N. Alpe, of the Solicitor's Department, Inland Revenue Office, Somerset House, who has had a wide experience in, and intimate knowledge of, the administration of the Acts which regulate the sale of proprietary medicines. The Handy-Book is, consequently, of exceptional value to chemists and druggists, especially in showing how medicines are made liable to stamp-duty by labelling circulars, and the like. Reviewers have been unanimous in stating that the work is not only complete, but interesting and invaluable. It is as free as possible from legal phraseology, is readable, and is nicely got up.

Contains 142 pages. Price 2s. 6d.; by post, 2s. 9d.

VETERINARY COUNTER PRACTICE.

There is probably no development of the drug trade which has so much money in it potentially as the treatment of animals. It is to be an aid to chemists and druggists in providing them with advice regarding the diseases and treatment of the horse, cattle, sheep, and other animals, that we have had this "Veterinary Counter Practice" compiled; and we think the instances will be few indeed in which it will fail to pay for itself in the first week or two after purchase.

Nearly 300 pages. Illustrated. 3s. 6d.; by post, 3s. 9d.

A MANUAL OF PHARMACEUTICAL TESTING.

Comprising simple instructions for the Testing of the Chemicals of the British Pharmacopœia, &c., with such materials and appliances as are in common use at the dispensing counter. By BARNARD S. PROCTOR, F.I.C.

The Book contains 176 pages. Price 2s. 6d.; by post, 2s. 9d.

Published at the Offices of

"THE CHEMIST AND DRUGGIST," 42 CANNON STREET, LONDON, E.C.

PARIS EXHIBITION, 1889.

PRIZE MEDAL AWARDED TO



"SALVO PETROLIA"

Absolutely Genuine Paraffinum Mollæ of the very Purest Form, and we claim that it is superior to Vaseline.

Manufactured by the Proprietors in Five distinct qualities—
WHITE, LEMON, YELLOW, GOLDEN, AND VETERINARY.

PACKED IN TINS, 1, 5, 10, 14, 28, 56, and 112 lbs. Also in 3-cwt. Cases.

"OLEUM DEELINÆ"

(REGISTERED).

UNIVERSALLY ADOPTED BY THE MEDICAL PROFESSION FOR
OPHTHALMIA, SCURVY, RINGWORM, ECZEMA,
AND ALL SKIN-DISEASES.

For External and Internal Irritation of every kind.

PACKED IN CASES—

One Doz. 1s. 6d. Bottles; One Doz. 2s. 6d. Bottles.

Pint Bottles, 4s. 6d. each, for Hospitals and Dispensing
Chemists.

TESTIMONIALS MAY BE HAD UPON APPLICATION.

"Edible Salvo Petrolia"

For Public Speakers, Actors, and Singers.
1s. 6d. per Tube.

The above are Manufactured Solely by the Proprietors,

THE DEE OIL COMPANY. LIMITED.

Works—SALTNEY, CHESTER.

OFFICES—

LONDON—38 LEADENHALL ST., E.C.

Liverpool, Dublin, Manchester, Glasgow, Hull, Cardiff,
Bristol, Belfast, Barrow-in-Furness, Nottingham,
Paris, Hamburg, &c.

CALVERT'S Carbolic FLUID, POWDER & SOAPS



Price Lists and Descriptive Pamphlets on application.

"PRICE'S GLYCERINE"

(Originally introduced in 1855).

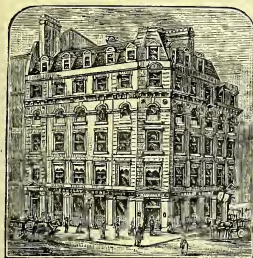
Guaranteed free from ARSENIC

and all other impurities.

WHOLESALE FROM

PRICE'S PATENT CANDLE CO., LIMITED,

London, Liverpool, and Manchester.

BARCLAY & SONS, Ltd.

Will our Seaside and other Friends kindly
note Price, Size, and Quality?

CHECK SPONGE BAGS.

No. 0	1	2	3	4	5	6	7
6x5	7x6	8x7	9x8	10x9	11x10	12x11	13x12
Per doz.	2/6	3/4	3/9	5/3	5/6	6/3	7/6
SUPER. CHECK.							
Per doz.	2/9	4/3	5/-	5/9	7/-	8/3	10/6

BATHING CAPS.

Circular, per doz. 4/6 6/- 8/6 11/6
 Normandy or Princess shape, per doz. 7/- 10/- 13/-



95 Farringdon St., LONDON, E.C.

E. C. Z. A.

THE NEW SKIN SOAP,

MADE ONLY BY

BAYLEY & CO., 17 COCKSPUR ST., LONDON,

THE SOLE AND ORIGINAL MANUFACTURERS OF

"ESS. BOUQUET" PERFUME and of the Celebrated "SPERMACETI SOAP TABLET."

PETROLEUM JELLY.

PARAFFINUM MOLLE, B.P.

(PIONEER BRAND) Registered Trade Mark.

Equal to and Cheaper than **VASELINE.**

FOR MEDICAL AND PHARMACEUTICAL PURPOSES.

White, Yellow, Veterinary, and Waterproof. All kinds put up in 1-lb., 5-lb., 7-lb., 14-lb., 28-lb., and 56-lb. Patent Tins, and in 300-lb. Barrels.

Pure Castor Oil, Cod Liver Oil, White Mineral Oil, Best Eating Olive Oil, Pale and Crude Carbolic Acid, Carbolic Powders, Sheep Dip, Benzine 50 per cent. and 90 per cent., Crude and Rectified Spirits of Tar, Stockholm Tar, Camphor Ice, Carbon Candles.

PATENT

CARBOLIZED PEAT,
THE NEW AND POPULAR DISINFECTING POWDER.

SEND FOR SAMPLES AND PRICES TO

GRINDLEY & CO., Lim., POPLAR, LONDON, E.
 (ESTABLISHED 1868.)

H. P. TRUEFITT'S SPECIALITIES FOR THE HAIR.

Floral Extract, 3/6, 5/-,
10/6, 21/-.

Egg Yulep, 2/-, 4/-

CONCENTRATED

Egg Yulep, 2/6,

5/-, 10/6.

Golden Fluid,

10/6, 21/-

EUXURON,

1/6.

&c.

Stimulating Lotion, 5/-,
10/6.

Astringent and Tonic

Lotion, 5/-, 10/6.

Quinine and Arnica

Hair Wash, 3/6,

5/-, 10/6, 21/-

Arnica Wash,

3/6, 5/-,

10/6.

&c.

EUCHRISMA.
Combines in one cheap fluid every valuable
component body of a Hair Dressing and Wash,
3/6, 5/-, 10/6, 21/-.

EAU RACINE.
For removing the original colour of Grey Hair;
a perfect and safe hair dressing, sold in its Compound at 10/6.

An elegant Preparation for
the Hair and Beard.
Price 2/6, 3/6, 5/-, 10/6, 21/-.

BRILLANTINE.

H. P. TRUEFITT'S TONIC TOOTH BRUSH

(BY ROYAL LETTERS PATENT)

PRICE ONE SHILLING.

20 & 21 Burlington Arcade; 13 & 14 Old Bond St., London.

Concerning Our Pills.

We beg to remind our agents that we sell two preparations—viz., Guy's Tonic and Guy's Fruit Pills. Nearly every Chemist now stocks and sells the Tonic, but we have found that many purchasers have experienced a difficulty in obtaining the Pills, as some Chemists only procure them to order. They are usually required in association with the Tonic to secure the best results, and instructions to this effect accompany each bottle of Guy's Tonic. It is quite evident, therefore, that wherever Guy's Tonic is in demand Guy's Fruit Pills will be inquired for. We ask you, then, in mutual interest, to hold a small stock to supply this certain need.

Guy's Tonic is sold Retail at 2/9 per Bottle, Guy's Fruit Pills at 1/1 and 2/9 per box.

For further information and trade terms, address Guy's Tonic Company,

4 Ludgate Circus,

London, E.C.

COCKING'S JAPAN OIL OF PEPPERMINT.

Our Extra Steam Refined Oil is freshly distilled and twice rectified by steam, by an entirely new process and in apparatus of our own invention, by which all those polymeric products of a tarry and resinous nature which are objected to by some consumers are extracted. It is of water-white colour retaining its full aroma, pungency, and strength, and guaranteed absolutely pure and soluble in spirits of wine.

COCKING'S JAPAN MENTHOL CRYSTALS.

Our Extra Steam Refined quality is in firm, hard, dry, and snowy-white crystals, entirely free from oily contamination, and therefore of the highest melting-point. As the original and largest manufacturers in the world of the true Japan Menthol, we guarantee our brand to be absolutely pure. Beware of substitutes. For full particulars, therapeutic uses, &c., see special circulars, to be had on application.

Sole Agents—JOHN BATT & CO., 39 OLD BROAD ST., E.C.

PURE FRENCH ESSENTIAL OILS (BRAND SOZIO & ANDRIOLI),

(Alpes Maritimes) GRASSE (France).

[ESTABLISHED A.D. 1757.]

Steam Works for all kinds of Essential Oils and Raw Materials for Perfumers, Pomades, Essences, Distilled Flowers, Waters, Sweet Almond Oil, &c., &c.

SPECIALITIES: Neroly, Lavender, Geranium (twice rectified on Rose Flowers), Thyme (red and white), Spike Lavender, Rosemary, Patchouly, Sandal Wood, &c., &c.

ONLY MAKERS OF THE CELEBRATED ORRIS ROOT OIL, crystallizing at +15° Reaumur

Flowers Pomades at the highest possible Saturation. Best Brand for Orange Flowers and Rose Water. Concentrated Essences, Sweet Almond Oil, &c. Stock kept in London.

LONDON AGENT—MR. FREDK. BOEHM, 27 BILLITER SQUARE BUILDINGS, E.C.

IMPORTANT NOTICE

TO CHEMISTS AND DRUGGISTS.



Messrs. A. ROWLAND & SONS, Proprietors of Rowland's Macassar Oil, Kalydor, and Odonto, have just had designed for them a new and beautifully-coloured

SHOW-CARD,

after the style of the illustration in this advertisement, and will be glad to send one to any Chemist or Druggist, Free of Cost, who will send his Name and Address; also Dummies of all three articles, to save the real articles from being soiled by exposure in the window or show-case, and Counter Bills with Name and Address.

A. ROWLAND & SONS, 20 Hatton Garden, LONDON.

R C TREATT

Dunster House Mining Lane
LONDON

IMPORTER OF

Musk Civet Ambergris Attar - of - Rose

ESSENTIAL OILS



Wholesale
and
Export
only.

APPLICATION

ON

QUOTATIONS

AND

PRICE LIST

ROBERT FRÈRES

PERFUMERS, GRASSE, FRANCE:

MANUFACTURERS OF THE WORLD-KNOWN

TRIPLE ESSENCES

NOVELTIES—QUEEN'S BOUQUET

(Composed in honour of Her Majesty's visit to Grasse)

LA RIVIERA, WALDHAUS, CARNATION,
WALLFLOWER, MAY BLOSSOMS.

Samples and Prices may be obtained from

R. HOVENDEN & SONS,

91 & 95 CITY ROAD, E.C., and 31 & 32 BERNERS STREET, OXFORD STREET, W., LONDON,

Where stock of all Extracts in bulk is kept.

EXCHANGE COLUMN.

FOR DISPOSAL.

Formulae.

Recipe for making finest brass-polish on earth, no acid used, post free 1s. Seymour Pollock, 312 Vauxhall Bridge Road, London.

How to make pure concentrated aromatic waters at half usual price; perfectly miscible with water; 1s. 1d. F. Hornblow, Sidbury, Worcester.

Arseucal sheep-dip, powder, liquid, paste; carbolic dip; butter-colour; weed-killer; 4s. each. 37/34, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

Quinine Bitters.—A genuine recipe, facsimile of popular preparation; cost trifling, easy made, copy of excellent label and bottle-enclosure (taking title); ready-made and satisfactory results; 2s. 6d. F. O.; honestly worth 20s. Address, "New 1d.," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

Educational.

Inocular microscope by Beck; three pairs of eye-pieces, 3-in., 2-in., 1-in.; 1-in., 1-in., 1-in. object-glasses; stage with mechanical movements and all necessary apparatus, lamp, cabinet, and valuable collection of slides, cost about 50s., price 25s.; will be sent on approval. 31/14, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

Bentley's "Botany" 4s. 9d.; Bentley's "Systematic" 2s. 3d.; Proctor's "Pharmacy," 2nd edition, 9s. 6d.; "Home Teacher," in 2 volumes, cost 2l., 26s.; Ince's "Grammar," 2s. 6d.; "Selecta e Prescriptis" 3s. 3d.; Lescher's "Recent Materia," 2s.; Proctor's "Testing," 2s. 3d.; "Veterinary Counter Practice," 3s. 3d.; "Medicine Stamp Duty," 2s. 3d.; all in good condition and carriage paid. Dunlop, Chemist, East Road, Irvine.

Drugs and Chemicals.

Surplus goods.—5 lbs. opium Turc. opt., 9s. per lb.; 9 lbs. spt. ammon. aromat., 2s. 2d. per lb.; 5 lbs. bals. copalb., 2s. per lb.; 50 lbs. good senna leaves, 34d. per lb. J. C. Lingdale, Skelton.

For sale, about 20 lb. pepsine, one part dissolves 635 part, well spoken of in *British Medical Journal* and other papers; samples on application; in one lot, cheap. Parkes, 156 Belsize Road, Kilburn, N.W.

Essence lemon, new crop, Pasqua's extra-super, in original coppers; also some essence orange; very low price accepted for prompt cash clearance; state quantity required. "Importer," 16 North Street, Wandsworth.

Argent. nit., iodoform, chloral hydrate, ferri quinine citrat., sodii salicylic., potass. iodid., 20 off Heaton's drug list (quantity on application), exchange for Beecham's, Scott's, Seigel's, Eno's, Holloway's, Cooke's, Steedman's, Kay's, Floriline, Florida. Fowler & Donaldson, Portsea.

Shop Fittings.

Entire fittings of chemist's shop for disposal at half cost, only put up last summer; great bargain. "Borax," 76 Smith Street, Warwick.

To Chemists.—Specie-jars and carboys, 11 various, in good condition, to be sold cheap; can be seen by appointment in London, or photos sent by W. H., Copford Lodge, Chichester Place, Brighton.

Shop-fittings, second hand, equal to new, for sale (great bargains), comprising drawers, counters, dispensing-screen, glass wall and counter (also), desks, bottles, and every requisite for fitting up a shop. Philip Josephs, 51 Old Street, Goswell Road, London, E.C.

Miscellaneous.

Parplus stock.—Honeycomb sponges, unbleached and clean (to retail about 1s.), 4s. 6d. per doz., carriage free; cash with order. Fields, Beverley.

Four Salt Regal, 6s.; 3 Eno's Moto, 1s. 9d.; 3 Ecodine, 1s. 6d.; 60 lb. pilules, salicab., new, 15s.; 6 Phosphorine, 4s.; microscope, 15s. Corke, Titchhurst.

Several 150-gallon and larger oil-cisterns, cheap; Weiss medical battery, with Leclanche element, unused. D. S. Anderson, Chemist, Chesterfield.

300 gross cork plugs; size about $\frac{7}{8}$ in. diameter, $\frac{1}{2}$ in. long, 3s. per gross; 100 gross at 24d., carriage paid; sample 1d. stamp. Adams, Mansfield.

12 doz. Maw's recess-labelled 20 oz. W.M. and N.M. bottles, nearly new; price for lot 7l. 10s.; free on rails. Walton, Chemist, Sowerby Bridge, Yorks.

Wedgwood mortar and pestles, 6, 9, and 10, 8s. the lot; fluted composition funnels, 1s to 8s, 3s. doz.; job line baby-comforters, black seamless teats, bone mounts and shields, 16s. per gross, or exchange. Frost, Beeston, Notts.

WANTED.

Shop-fittings and utensils, all descriptions, for cash. Natal & Co., 40 Gray's Inn Road, Holborn, London.

Judd's "Catalistics in Pharmacy," exchange Angell's "Electricity," or cash. Judd, 34 Warwick Lane, Coventry.

Wanted, "British Pharmacopoeia," also Martindale's "Extra," both last editions. Robinson, Chemist, Anlaby Road, Hull. Seach's "Botany," Sutton's "Volumetric Analysis," Ganot's "Natural Philosophy," also microscop. Carnegie, Wellgate Laboratory, Dundee.



Look!

We thank our Customers for the patronage so kindly bestowed upon us, and beg to remind them they will find us ever ready to place the resources of our office at their disposal.

BOWERS BROTHERS, Printers
89, Blackfriars Road, and
70, Canterbury Road, Brixton S.E.

Important Features.



NEWEST SHADES IN INKS.
NOVELTIES IN PAPER.
LONG EXPERIENCE.
ORIGINAL IDEAS.
LATEST DESIGNS.
FAST PRESSES.
CHEAPNESS.

Write for Estimates & Specimens

Listen!

FINE SATISFACTORY.
APPROPRIATE.
ATTRACTIVE.
ARTISTIC.
QUAINT.
PLAIN.
ODD.

PRINTING

WHAT APPEALS MORE PERSUASIVELY?

Bowers Brothers, Blackfriars, London, S.E.



ESCHMANN BROS. & WALSH,

Inventors and Manufacturers of the

SOFT SILK FLEXIBLE CATHETER, GUARANTEED WITH WOVEN EYES.

To be had of all Surgical
Instrument Makers
and Wholesale Houses.



To be had of all Surgical
Instrument Makers
and Wholesale Houses.

PURE CALF VACCINE

Dr. HIME'S CALF VACCINE INSTITUTION, BRADFORD, YORKS.

As supplied to

THE GOVERNMENT (in Ireland), BOARDS OF GUARDIANS, PUBLIC VACCINATORS, &c.

1 Tube	..	..	..	..	..	..	..	1s. 0d.
3 Tubes	..	..	..	..	..	..	..	2s. 6d.
1 Point	..	..	..	..	..	..	..	5d.

"Conserve" as used by public vaccinators in Germany (specially recommended), 2s. 6d., 5s., &c., according to quantity. Reissner's Powder and other forms, as desired, on reasonable notice.

Vaccination of Calves and collection of Vaccine under strict antiseptic precautions. Tubes, &c., sterilized before use. Testimonials and other particulars on application.

CORN PLASTERS.

JOHNSON & JOHNSON.

WHITE FELT CORN PLASTERS.

JOHNSON & JOHNSON.

Particular attention is drawn to the quality and whiteness of the felt used in our Corn and Bunion Plasters. They will not curl at the edges and thus become useless. In 6d. boxes, round or oval, Thin, 2/3 per dozen boxes. In 6d. boxes, round or oval, Thick, 2/10 per dozen boxes. The advantage of the 6d. box is that you are enabled to sell twelve Plasters to a customer where you would only sell one if packed loose.

RED CROSS CORN PLASTERS.

JOHNSON & JOHNSON.

White felt. Rubber base. Adhere without heat or moisture.

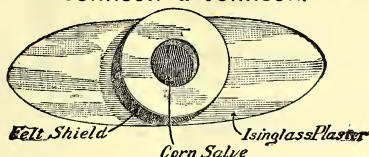
Conform readily to the part to which they are applied.

Always soft and pliable and comfortable to the foot.

In 6d. boxes, 3/9 per dozen.

LONDON CORN PLASTERS.

JOHNSON & JOHNSON.



Briefly described as follows:—The centre is a piece of Salicylic Plaster Mass (40 per cent.), which is placed over the corn. Around this is a corn shield which prevents pressure from the boot, and the Salicylic from going beyond and injuring the flesh.

The whole is kept in position by means of a strip of adhesive plaster on the back.

SALEABLE

BECAUSE

SENSIBLE.

Packed in 6d. and 1s. boxes. Sample dozen mailed to any chemist's address on receipt of 3/6 for the 6d. size, or 6/6 for the 1s. size.

ARNICATED FELT CORN PLASTERS.

JOHNSON & JOHNSON.

These possess the same advantages as the white, in addition to which a percentage of arnica is added to the adhesive material used, in many cases a great advantage.

In 6d. boxes, round or oval, Thin, 2/3 per dozen boxes.

In 6d. boxes, round or oval, Thick, 2/10 per dozen boxes.

BELLADONNA CORN PLASTERS.

JOHNSON & JOHNSON.

Same as "Red Cross," with the addition of Belladonna to the base.

Where pain is experienced, they will be found to have a soothing effect.

In 6d. boxes, 3/9 per dozen.

EMP. SALICYLIC AND CANNABIS INDICA.

(Salicylic Acid 20 per cent. Cannabis Indica 25 per cent.)

EMP. SALICYLIC 40 per Cent. EMP. SALICYLIC 25 per Cent.

These are prepared with rubber base, so that they adhere without heat or moisture. Are spread on strong cotton cloth. In yard rolls 7 in. wide. Chemists can cut to any size required. We specially recommend our Salicylic and Cannabis Indica as a Corn Plaster.

IN ORDERING FROM THE WHOLESALE TRADE PLEASE SPECIFY **JOHNSON & JOHNSON.**

JOHNSON & JOHNSON, LTD., 1 & 2 AUSTRALIAN AVENUE, LONDON, E.C.

A WONDERFUL SUCCESS!!**NON-INTOXICATING BEER**

Made from MASON'S Original

EXTRACT of HERBS

(REGISTERED.)

Composed of Yarrow, Dandelion, Comfrey, & Horehound.
ENLARGEMENT OF SIZE.A Sixpenny Bottle makes EIGHT GALLONS of
HERB OR BOTANIC BEER

A NON-INTOXICATING BEVERAGE

Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most perfect substitute for Alcoholic Drinks ever discovered, for either Summer or Winter.

BEWARE of mean and fraudulent imitations.**BEWARE** of others copying our title.**MASON'S** is the original and only genuine.**MASON'S** is a Special Compound entirely from Herbs

NO OTHER EXTRACT MAKES BEER LIKE IT.

Sold in Bottles at 6d., 1/, & 2/ each, with directions.

MASON'S WINE ESSENCES

Make Temperance Wines in a few minutes.

Ginger, Orange, Lemon, Raspberry, Black Currant, &c.
These are having a very large sale now, and are extensively advertised
Sold in Bottles at 6d., 1s., and 2s. each.

Quotations on application.

SOLE INVENTORS &
MANUFACTURERS: **NEWBALL & MASON,**
Manufacturing Chemists and Botanic Druggists, NOTTINGHAM.**Fragrant**

"BOUQUET"

CachousSIZES
&
SHAPES.SIZES
&
SHAPES.**RED & WHITE ROSES.****HELIOTROPE, VIOLET, PRIMROSES, ORANGE BLOSSOMS.**

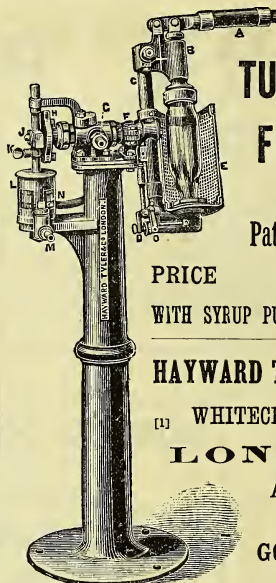
AND

OPOPONAX.

THE FLAVOUR AND FRAGRANCE ARE UNEQUALLED.

2/6 lb. { 5 per cent. discount.
Carriage prepaid on 14 lbs.**RAIMES & CO., York & Edinburgh.**

Agents—TIDMAN & SON, 21 Wilson St., Finsbury, LONDON.

**IMPROVED
TURNOVER
FILLERS**

FOR

Patent Bottles.

PRICE ... £7 1s.

WITH SYRUP PUMP £9 9s.

HAYWARD TYLER & CO.

11 WHITECROSS ST.

LONDON.**AWARDED****4****GOLD****MEDALS.**BY SPECIAL
H.R.H. THE DUKE OF
ROYALAPPOINTMENT TO
CONNAUGHT AND THE
FAMILY.**BOURNE WATERS.**

THE PUREST IN ENGLAND.

R. M. MILLS & CO., BOURNE, LINCOLNSHIRE,

MANUFACTURERS OF

**SODA, POTASH, LITHIA, AND SELTZER WATERS
LEMONADE, AND AROMATIC GINGER ALE.****4-dozen and 6-dozen Cases Carriage Paid.**

Special attention is invited to our manufacture of

LITHIA WATER.Each Bottle contains an average dose of Carbonate of Lithia—
the recognised Specific for Gout.**THE LATEST SPECIALITY**—the Celebrated Artesian Bourne Water in
Pints and Quarts for Table Use.

Prices and Pamphlet on application.

Agents appointed.

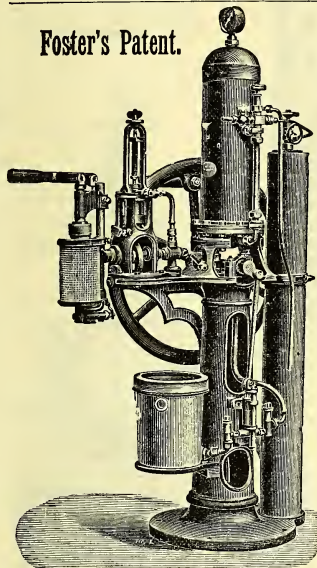
MESSRS. HARDY & CO., Chemists, 23 FENCHURCH STREET.**D. WHEATLEY, 16A NORTH AUDLEY STREET.****INDEX TO ADVERTISEMENTS,**

Pages 25 to 27.

SODA WATER MAKING

WITH
LIQUEFIED CARBONIC ACID GAS.

Foster's Patent.



The No. 2 Compact Soda Water Machine.

THE No. 1 "COMPACT" MACHINE

Is specially designed for Chemists and Hospitals, and can be used for either Syphon, Ball-stoppered Bottles, or Cork Bottles.
Producing capacity, by hand power, 60 dozens per hour.

Price **£60**, including Bottling Machine.

Or, if fitted for steam power, 120 dozens per hour, with an extra filling machine.

THE No. 2 "COMPACT" MACHINE

(AS SHOWN)

Made on the same principle, but smaller in its capacity.
Producing capacity, by hand, 30 dozens per hour.

Price **£48**, including Bottling Machine.

Or, if fitted for steam, 60 dozens per hour, with an extra filling machine.

Iron Vessel containing an average of } 10s.
28 lbs. by weight of Liquefied Gas } each.

And has sufficient Gas to manufacture about 18 gross of highly-charged Soda Water (10-oz. Bottles), or double this quantity of splits.

A Charge of £3 is made for the Iron Vessel as deposit, which is returnable.

These Machines occupy little space, and are ready for use immediately! They require no fixing! Are self-contained and produce soda water, lemonade, &c., of the highest class and greatest purity, at a minimum of cost.

THE "NIAGARA" BOTTLE Or Improved Codd's

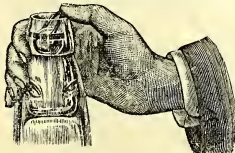
Is the most perfect Bottle in the Market.

Send for Sample and Compare.

PRICES ON APPLICATION.

Name on Bottles free for orders of 30 gross. Under that quantity, Moulds charged 10s. for each size or shape. Extra Rings, 1s. 6d. per gross.

The patent "Attached Opener" converts the "Codd" type of bottle into the easiest opened of any in the market. It can be instantly fitted; the bottle can be instantly opened by a child without danger; and it does away with the separate opener. Price 3s. per gross.



Buy the "LONDON MADE"

SYPHON

(Title Registered)

AND SUPPORT BRITISH INDUSTRY.

It is the cheapest, strongest, handsomest, and best in the World.

Pure Block Tin Tops

PRICE **1/6** EACH.

Nickel-plating Tops from 4d. each.
Silver-plating Tops from 6d. each.
Marking on Tops free for orders of 250.
Smaller quantities, steel die charged.
Marking on Vases Free for orders of 1,000.
Smaller quantities, plate charged 7s. 6d. upwards according to design.

Before placing orders for Syphons see Foster's latest improvement—

THE PATENT CHECK VALVE,
Which prevents too sudden an outflow and also renders the water more sparkling.



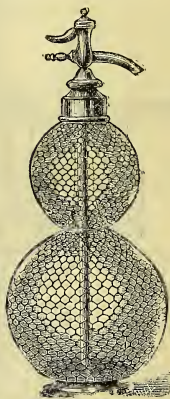
ILLUSTRATED CATALOGUE FORWARDED FREE UPON APPLICATION TO
BARNETT & FOSTER, "NIAGARA WORKS," 26T EAGLE WHARF ROAD, LONDON, N.

SYPHONS • SELTZOGENES



**SODAWATER
MACHINERY**
AND APPLIANCES
BRATBY & HINCHLIFFE LTD
ANCOATS 146 MINORIES
MANCHESTER & LONDON
81 ROBERTSON STREET, GLASGO

All our Seltzogenes are manufactured on the well-known "Fevre" System, and each one is thoroughly tested before leaving the works.



PRICES.

SYPHONS ... 1/6 1/8 and 1/10 each.

SELTZOGENES.

1	2	3	4	5	8 pint.
5/6	6/2	7/	8/	9/11	15/6 each.

Including two funnels and stopper for charging.

PURE ORANGE WINE

(VINUM AURANTII, B.P.), prepared in strict accordance with the Formula of the British Pharmacopoeia.
MOST SUITABLE BASIS FOR QUININE AND OTHER MEDICATED WINES.

CAN BE OBTAINED FROM THE MAKERS—

A. MILLAR & CO., Thomas Street, DUBLIN.

Sole Agents for London and District—H. J. ROYDANT & CO., 75 Acre Lane, Brixton, S.W.

TO CHEMISTS AND DRUGGISTS.

WANTED, AGENTS IN ALL TOWNS FOR



THE CHAMPAGNE OF NATURAL MINERAL WATERS.
SPARKLING, BRILLIANT, and EFFERVESCING.
Allows a Larger Profit to the Trade than any other Natural Mineral Water.

Testimonials from Royalty, and highly recommended by the most eminent members of the Medical Profession as the Finest Natural Mineral Water known.

GEROLSTEIN COMPANY. Offices—153 Cheapside, LONDON, E.C.

THE BERKEFELD - NORDTMEYER FILTER.



THE LANCET, September 12, 1891:—"We have put the Berkefeld Filter through many rigid tests; we have not obtained the slightest evidence which would enable us to contest any of the statements made in regard to this filter."

ADVANTAGES.

Rapid, Perfect, and Permanent Filtration.
Easy Cleaning and Sterilization.
All Descriptions Supplied.

See Illustrated 4-page Circular, Jan. 30.

THE BERKEFELD FILTER CO., 70 MARK LANE, LONDON, E.C.
LOCAL AGENTS APPOINTED.

LOEFLUND'S MALT AND STERILIZED MILK PRODUCTS



LANCET.—"We have nothing but praise to bestow."

BRITISH MEDICAL JOURNAL.—"Pure Hordeum possesses all the properties claimed for it."

Cosmopolitan and Druggist.—"Pure Hordeum may be relied on to contain the highest attainable proportion of diastase."

KINDERMILCH } Infant
ALPINE MILK RUSKS (ground) } foods
CREAM MILK, unwarmed, sterilized.
CREMOR HORDEATIS, delicious substitute for Cod-liver Oil.
PURE HORDEUM (Malt Extract) } also
with Cod-liver Oil, Hops, Iron, Limes,
Quinine, and Peppine.

MALT EXTRACT LOZENGES.
MUSTARD LEAVES, best and cheapest.

—ROBERT BAELZ & CO., 14-20 St. Mary Axe, E.C.

The Chemist and Druggist

SUPPLEMENT

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, MAY 14, 1892.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

A Copy of this Supplement is inserted in every number issued of "The Chemist & Druggist."

PLEASE NOTE.

ADVERTISEMENTS for this Supplement must be received at the Office, 42 Cannon Street, E.C., not later than 5 o'clock on Thursday Evenings, for insertion in the current week's issue.

Advertisements must be prepaid. Remittances by post may be made in stamps, or by postal order made payable to "EDWARD HALSE," and crossed MARTIN'S BANK (LIMITED). To ensure prompt attention address all communications, endorsed "Supplement," to THE PUBLISHER OF "THE CHEMIST AND DRUGGIST."

OFFICES: 42 CANNON STREET, LONDON, E.C.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1848, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—LONDON.—Thickly populated locality; very old-established Family Business; returns as present, under management, £1,300 yearly; all profitable trade; good personal introduction will be given; about £1,200 required; worth attention.

2.—LONDON, N.E.—Old-established good-class Pharmacy for immediate disposal at; vendor retiring; returns last year over £200; large well-fitted shop and good stock; good house, garden, and greenhouse attached; terms, small premium and valuation; part of purchase-money may be paid by instalments.

3.—LONDON, N.—Good ready-money locality; Retail and Dispensing Business; returns at present over £500 yearly, increasing; well-fitted shop and good stock; large 8-roomed house with private entrance; about £300 required.

4.—LONDON.—Thickly populated locality; Prescribing Business for immediate disposal, through the death of late proprietor; returns at present about £2 per week; capable of being much increased; well-fitted shop and good stock; about £350 required.

5.—HOME COUNTY.—Rapidly improving locality; good-class Family Business; returns at present about £900 yearly; all ready-money and very profitable; good house in excellent condition; about £280 required.

6.—LONDON SUBURB (West).—Light Retail and Family Business with good appointment attached; returns at about £265 yearly; well-fitted shop and good stock; about £200 required; every investigation allowed.

7.—LONDON.—Retail and Dispensing Business; well situated; held by vendor over 20 years; now retiring; returns about £450; all-profitable business; shop well fitted; very good house, with garden; price about one year's returns.

8.—HANTS.—Good Business town; small Branch Business for immediate disposal; returns at present, under manager, nearly £350; well-fitted shop and good stock; valuation only required; a good manager with a view to succession would be entertained.

9.—SOUTH WALES.—Good market town; Retail and Family Business; returns £1,360 yearly, with good profits; has been held by the same family for over half a century; shop well-fitted and good stock; about £900 required.

10.—NORFOLK.—Good class Country Business, steadily increasing; returns at present at the rate of £1,400 yearly; good house &c., with good garden attached; about £1,200 required.

11.—SURREY.—Near the Crystal Palace; good-class Retail and Dispensing Business; returns nearly £500 yearly, with good profits; double-fronted shop, well fitted, and good stock; about £375 required.

12.—HANTS.—Fashionable locality; good-class light Retail and Dispensing Business; returns about £280; full profits; handsome shop and good stock; about £250 required.

13.—BIRMINGHAM.—Old-established Business, situated in a main thoroughfare; returns from good-class trade about £700 yearly; well-fitted shop and good stock; about £430 required.

14.—HOME COUNTY.—Attractive locality; Very old-established Family Business (Mixed); returns about £1,250 yearly, with good profits; large house, and good shop attached; terms required, small premium and valuation.

Particulars of any of the above will be furnished on application.

N.B. NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country. Particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION. Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the special attention of a London Agent.

NOTICE.—Messrs. ORRIDGE & Co. have a large number of Businesses for Sale, suitable for Gentlemen with Small Capital. Full particulars on application.

SPECIAL NOTICE TO PRINCIPALS AND ASSISTANTS.

MESSRS. ORRIDGE & Co. Register Vacancies for Situations FREE OF CHARGE.

ORRIDGE & CO., 32 LUDGATE HILL, LONDON, E.C.

F. J. BRETTE,

VALUER, LEICESTER,
60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE NO CHARGE TO BUYERS.

STOCKTAKING UNDISMISSABLE.—Stocktaking is always dreaded by Chemists, and with a competent Valuer is not necessary.

F. J. BRETTE is prepared to estimate or to value entire stocks as they stand with little or no inconvenience to ordinary business, and has repeatedly done so with entire satisfaction to those adopting this mode.

STOCKS AND FURNITURE BOUGHT FOR CASH.

£1,500 returns; YORKS.—Good General Retail and own specialties, with Wines and Spirits; rent small; business is increasing, and is capable of continued increase; price about £250.

YORKS.—Mining district; ready-money Retail, doing £14 week, all cash; any amount of Prescribing; each price £555.

KENT.—Returns £1,000; popular seaside resort; good position; light Retail and good Proprietaries; price about £300.

STAFFS.—Returns over £600 as Branch; good house and garden; Light Retail and Prescribing, in growing part; price £450.

WALES, N.—Unopposed Light Retail and Prescribing; established over 20 years by vendor; returns £635; Welsh not necessary; price £500, or valuation.

MESSRS. BERDOE & CO.

CHEMISTS' TRANSFER AGENTS & VALUERS,
30 JEWRY STREET, ALDGATE, E.C.
Established 1870.

VALUATIONS AND TRANSFERS conducted in any part of the United Kingdom. Over twenty years' practical experience.

NO CHARGE TO PURCHASERS.

EDINBURGH.—Retail and Dispensing Business; returns £700; net profit £270; rent £35; elegantly fitted shop, well stocked, good position, main road; only valuation required, about £500.

NORFOLK (Coast).—Retail and Dispensing Business; returns £600 under manager, capable of doing £1,000; convenient house, excellent position, facing the sea; price £400; could let off all rent.

DERBYSHIRE.—Light Retail and Dispensing Business; returns £750; net profit £300; good house, excellent position; price £575; well-fitted corner shop; good stock; personally inspected.

ISLE OF THANET (Kent).—Good-class Retail and Dispensing Business, in excellent position; returns £1,000, with scope for improvement; terms, valuation, about £750; personally inspected.

HANTS.—Fashionable seaside resort; Retail and Dispensing; returns £900, good prices; very handsome shop and premises; large stock; price £300, stock and fixtures worth £700.

LINCOLNSHIRE.—Good market town; Retail and Prescribing Business; returns £800; net profit £300; large house, good warehouse; taken larger business; price £500; worth attention.

NORTHAMPTONSHIRE.—Unopposed Retail and Prescribing Business; returns £500 under manager; must at once increase under principal; rent only £12; good house and garden; price £300.

SURREY.—Unopposed position, Retail and Prescribing Business; returns £5 weekly (for sale through illness); can be doubled; low rent; 6-roomed house, garden, and stable; price £100.

LONDON, N.—Good-class Retail, Dispensing, and Prescribing Business; returns £1,200; well-fitted shop, heavy stock; large house, good garden; price £1,000; strictest investigation.

LONDON, S.E.—Retail and Prescribing Business; returns £8 weekly under management; good house, rent £30; selling through illness; valuation only required.

LONDON, N.W.—Retail and Dispensing Business; returns £650; net profit £200; good house; well situated in main road; over 20 prescriptions weekly; price £300; selling through illness.

Particulars of the above and others sent free on application.

Messrs. Berdoe & Co., 30 Jewry Street, Aldgate, E.C.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

FOR SALE. Old-established Chemist's Business in Liverpool; good Family and Dispensing trade; large house; returns upwards of £700. Apply to John Smith, 51 Myrtle Street, Liverpool.

MANCHESTER. Chemist's Business to be disposed of; good thoroughfare, good premises; returns about £350. Address, 42/12, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

£175.—A genuine Business for sale, returning £429 per annum under management; well stocked; rent low; good house; satisfactory reasons for disposal. Apply, "Alpha," 19 Warwick Street, S.E.

LONDON, N.—Good opening for a Chemist with small capital; has been conducted as a Chemist Business about 50 years; good introduction can be given; worth attention. Apply to Messrs. Orridge & Co., 32 Ludgate Hill, London, E.C.

Messrs. CROCKER & CO.

Trade Valuers, Transfer Agents, and Accountants,
15 WALBROOK, E.C.

HOME COUNTY.—Good-class Country Retail and Dispensing, with excellent sale of own proprietaries; returns £900; price £700.

HANTS.—Good-class Retail and Dispensing trade, much neglected; returns £350; price £300. This is a good chance for a pushing man, as the trade could soon be increased fourfold.

MIDDLESEX.—Good-class Light Retail and Dispensing; returns £500; price £400; good house and garden; low rent.

HANTS.—Light Retail, Prescribing, and Dispensing; returns £450; price £300; valuable agency attached.

BERKSHIRE (Death vacancy).—Country Retail and Dispensing trade; returns under management £700; price £450, or offer; a pushing man would soon do double.

YORKSHIRE.—Retail and Dispensing, with Gilbey's Agency and Post Office; returns £1,650; price £200, or valuation.

MIDDLESEX.—Death vacancy. Good-class Retail and Dispensing trade; returns £300; price £750. Worth attention.

HANTS.—Light Retail, Prescribing, and Dispensing; returns £450; price £300; valuable agency attached.

SURREY.—Light Retail and Dispensing; returns £300; price £250; good house; handsome pharmacy; agency pays rent. (30s.)

MIDDLESEX.—Retail, Prescribing, and Dispensing (a little heavy); under management of assistant; returns £750; price £300. (R. 19.)

DEVONSHIRE.—Country Retail, unopposed; returns £650; rent £20; price £350; open to offer; good house and garden. (R. 13.)

YORKSHIRE.—Light Retail and Dispensing; returns £550; price £320; plenty of scope for pushing man. (R. 17.)

LAKE DISTRICT.—Unopposed Country Retail and Dispensing, with a house; returns £700; price £350; very profitable.

HOME COUNTY.—Good-class Dispensing trade, in best part of pretty market town; returns £600; price £550; worth attention. (30s.)

MERIONETHSHIRE.—Retail, Dispensing, and Prescribing trade; returns £675; price £450, or valuation; very desirable residence.

KEWISH COAST.—First-class Retail and Dispensing; returns £650; price £550; first-rate opportunity for a pushing man to acquire a most desirable business.

SOUTH COAST.—Favourite health-resort; good-class Retail and Dispensing; returns £1,000; price £800, or valuation.

LONDON, W.—First-class Retail and Dispensing; main thoroughfare; returns £850; price £200, to include valuable lease.

LONDON, N.—Light Retail, Dispensing, and Prescribing; returns about £300; price £450; very handsome pharmacy.

NO CHARGE TO PURCHASERS.

VALUATIONS A SPECIALITY. TERMS ON APPLICATION.

BUSINESSES FOR DISPOSAL—Continued.

NEAR LIVERPOOL.—A high-class Retail and Dispensing Business; very handsome, fitted shop; large house and garden; a splendid opportunity for a first-class man. Address, C. F., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WAPPING, E., near London Docks.—For immediate disposal, well-established, small Retail Chemist's; old-established; could be greatly increased, or would suit a surgeon; low rent, all at £75. 38 Great Hermitage Street, Wapping, E.

NORFOLK.—For immediate disposal, a small village business in first-class neighbourhood; exceptional opportunity for energetic man who would push the trade; incoming under £100. Apply to Messrs. Smith & Sons, Wholesale Druggists, Norwich.

LONDON (West), main road.—Ready-money good-class Business; old-established; returns last year £644; appointments pay rent; double-fronted shop; mahogany fittings and well stocked; good house (held on lease); half could be let off; investigation invited. H. Verrell, 40, Vennetia Road, South Ealing, W.

£180.—In London suburb, S.E.—A business for immediate disposal; established over 30 years; opening for Dentistry; 6 rooms; selling garden; rent £35; returns about £200. "Sigma," Messrs. Smith & Co., 132 Borough, London, S.E.

LONDON, N.—An old-established Business in a busy thoroughfare, very much neglected; large shop, well fitted and stocked; price £200, or offer; £500 twelve months ago. "Minim," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ON THE COAST.—In a large and fashionable watering-place, Dispensing and Light Retail Business, making a return of £750 yearly; rent £48; good house in thorough repair; price about £200. "Aloe," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

IDLESBROUGH.—Old-established Business, in main thoroughfare; can be greatly improved; good Shipping and Prescribing trade; immediate possession; income £400, on easy terms. Apply, James Hellely, Yarm Lane, Stockton-on-Tees, Transfer Agent.

SPECIAL NOTICE.—By order of the Mortgagee.—Immediate Sale.—Old-established business situated in prominent position; London, South; about £550 required, for which full value is offered. Apply at Messrs. Orridge & Co.'s Offices, 32 Ludgate Hill, London, E.C.

BUSINESSES FOR DISPOSAL—Continued.

COVENTRY.—Mixed Business in leading thoroughfare; centre of bicycle industry; established 18 years. Williamson, Chemist, Coventry.

A **GENUINE** Retail and Dispensing Business for immediate disposal; same hands many years; good profits; returns over £600; inventory; good house and lease, &c.; price £500, valuation if wished. Address B, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

FOR immediate disposal, the business carried on by the late Mr. Robert Hughes, Chemist, Llangefni; established upwards of 60 years, and situated in the best position in the county of Anglesey; also the house and shop (freehold). Apply, R. H. Hughes, Bank House, Cowbridge, Glamorgan-ship.

FOR immediate disposal, in the best situation of a small market town in Suffolk, a Business successfully carried on for upwards of fifty years; average returns, £700; capital required about £600. For terms and particulars apply to Grimwade, Ridley & Co., Wholesale Druggists and Valuers, Ipswich.

NORTH LANCASHIRE.—Genuine old-established Retail, Prescribing, Agricultural, and Mixed business for immediate disposal through failing health of proprietor; a fortune to a pushing young man with a little capital; returns £700, cash price £360. Edwards, Druggist, Broughton-in-Furness.

NORFOLK.—Through sudden death of Proprietor—Genuine Retail Business; good chance for pushing man; returns £300, but can easily be increased; to be sold at valuation of stock and fixtures. Apply for particulars, Smith & Sons, Wholesale Druggists, 44, 46, and 48 Magdalen Street, Norwich.

A **GENUINE** well-stocked Family, Retail, and Dispensing Business; situated in a main street of a large residential town within 12 miles of the City; returning under manager £20 per week, but under an energetic principal could be doubled; cash price £800. Apply, "S," 7 Selhurst Road, South Norwood, S.E.

LONDON, N.—Cash Retail, returning £900 with good profits; patents (only goods cut) 104; rent, rates, taxes, gas, and water, £100 per annum; price £750 or by arrangement; good selling proprietaries and plenty of scope for increase. Apply, "Seidlitz," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

FOR immediate disposal, owing to having taken larger business, a profitable Light Retail, in one of the principal thoroughfares out of Manchester; fast increasing district; present returns £5 weekly; good stock; well fitted; price £210. Address "Genuine," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

FASHIONABLE health resort; principally Dispensing, with Light Retail and own specialties; very few patents; no heavy trade and most profitable prices; proprietor accepting partnership in larger concern sole reason for disposal; season just commencing; £775 or offers. "Moxon," 13 Spring Gardens, Buxton, Derbyshire.

CHEMIST and Druggist.—Full-price and Dispensing Business; established and in the same hands over 30 years; present proprietor retiring; in the best thoroughfare of one of the largest seaside towns in Norfolk; £125 will be accepted from an immediate purchaser for good will, fixtures, fittings, &c. Apply early to J. C. Denton, Bedford.

GUERNSEY, Channel Islands.—Market town; old-established Retail, Dispensing, and Prescribing Business in a thickly-populated neighbourhood; returns £400; convenient house, good store-room; rental £38; price to an immediate purchaser £250; ill-health only cause of disposal; particulars on application. J., 10 Fowler Street, Walworth London S.E.

PRESCRIBING, Dispensing, and Mixed Retail, in an Agricultural district, Market Town; returns about £700, could be rapidly and easily increased; large shop, 2-roomed house, warehouse, and garden; great sacrifice to an immediate purchaser; fine scope for a good business man. M. F. C., Office of THE CHEMIST AND DRUGGIST, 42 Cannon St., E.C.

DEATH VACANCY (Berkshire).—Good-class Retail, Dispensing, and Prescribing Business, returning £700; large shop, well fitted and stocked; very convenient house, with large garden; best position in small market town; price £400, or offer; immediate sale desired. "Exora," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

IMMEDIATE Disposal, Light Retail, Prescribing, and Dispensing Business; returns £300; exceptional profits; capable of increase; machinery, fittings and well stocked; cause of sale, owner taking larger business; every investigation allowed to bona-fide applicants; price £150, or offer; good opening for Dentistry. Morris, Chemist, 117 Hessele Road, Hull.

LANCASHIRE.—Best position in large town; old-established Light Retail and Dispensing Business; double-fronted shop, on lease, recently fitted in first-class style; returns over £1,000, capable of increase; to old stock; most prices obtained; patent trade small; satisfactory reasons for selling. Address, 46, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LONDON.—Busy main road; thickly populated neighbourhood; old-established Retail and Prescribing, with several good specialties and nucleus of Dentistry, which could be largely increased; 1½ years' lease at £60; large well-fitted shop, good house (9 rooms), private entrance; price £250, part could remain. A. E., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

CHEMISTS' Business for disposal, in leading thoroughfare in Nottingham; good stock; £8 to £10 per week; books shown; family reasons for leaving; price £100. Apply, Day, Solicitor, Wheeler Gate, Nottingham.

LONDON, S.W.—Death Vacancy.—For immediate sale, old-established Business; same hands 29 years; a long lease at a low rent; well-stocked, nicely-fitted, shop; returns £420; price £450. Apply, 100 Fulham Road, South Kensington, S.W.

LONDON, S.E.—Crystal Palace District.—A rapidly-increasing Retail and Dispensing Business, in most desirable locality; returns £500; price £475; handsome pharmacy and good residence, fitted with every modern convenience. Apply, "Crystal" Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

NORTH OF ENGLAND.—First-class Retail and Dispensing Business, standing in best part of busy manufacturing town, for disposal under most satisfactory circumstances; returning, at full prices, £1,050, and capable of considerable increase; price, small premium for goodwill, and valuation stock and fixtures. Apply, "North," c/o Messrs. Jones & Co., 14 Miles Lane, E.C.

KENT.—Returns £200 and increasing; Dispensing, Retail, and Prescribing, in large village; unopposed; established as a branch two years and capable of considerable development; would suit beginner with small capital; good opening for Dentistry; strictest inquiry invited, and a reasonable offer will not be refused; rent nominal. Address, A. P. S., 231 Essex Road, London, N.

GENUINE Retail Drug Business for sale; established 20 years ago by present proprietor, who is retiring from retail; long lease, as lock-up shop, or with house; 10 minutes from London Bridge, Surrey side; thickly populated; very brisk ready-money drug trade, with two or three good proprietary lines. Address, "Practical Chemist," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LONDON SUBURB.—An old-established Dispensing and Retail Business; splendid situation, commanding two great and important thoroughfares; very large good-class shopping centre; admirably adapted, from its position and convenient premises, for anyone desirous of extending the Stores system of business; valuable proprietary article connected with it, stocked by the leading Retail and all the Wholesale Houses; an exceptionally valuable lease, at low rental; for immediate disposal. Address, "Chemist," Gloucester Villa, Genoa Road, Anerley.

BRISTOL (City).—Beautiful Light Retail Dispensing and Prescribing Pharmacy, returning £13 weekly, but capable of taking £30 by a good pushing man; handsomely fitted double-fronted shop, in main thoroughfare, and superior modern dwelling-house, containing dining and drawing rooms, parlour, shop, consulting room, five good bed rooms, large kitchen (with excellent range); all enclosed retire yard, private back entrance, &c., &c.; rent only £40; no opposition; densely populated neighbourhood; no Agents; price £400. Address, "Chemist," Medical Hall, 135 Lawrence Hill, Bristol.

BUSINESSES WANTED.

3s. 6d. for fifty words. 8d. for every 10 words beyond.

WANTED, a good Business, within 50 miles of Manchester; returns good, or capable of increase. State particulars to P., 10 Hawkshead Street, Southport.

WANTED, in the Midland or Southern Counties, a reliable Retail Drug Business, returning £800 to £1,000. Full particulars, in strict confidence, to A. Z., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, to purchase for cash a Patent Medicine or other Proprietary Business making a reliable net income at the present time; useless to reply unless fulfilling this condition. F. Weston, 52 Upper Mall, Hammersmith, W.

WANTED, immediately, a reliable Retail and Dispensing Business in South, South-west, or West of England, returning about £1,000 a year at fair prices; advertiser has just sold his own business in North of England, is desirous of meeting with suitable concern at once. "Minor," c/o Chemist, 126 Fairbridge Road, Holloway, N.

FOR SALE.

TO Chemists and Druggists.—To be Sold, a bargain, either for removal or as a going business, the entire Stock and Fittings of a Chemist Shop. Apply, at once, personally, Mr. Johnson, 412 Mansion House Chambers, Queen Victoria Street, City.

£15.—For Disposal, Stock, Fixtures, and Fittings of a small Chemist's Shop as they stand; proprietor just deceased; been doing a good business in a poor neighbourhood; very suitable for young beginner. C. C., 57 Delaford Road, South Bermondsey, S.E.

TO Chemists and Druggists.—For sale, 4 elegant Dispensing Screens; 20 sets of Druggists' Drawers with glass labels, crystal knobs; splendid Wall Case in Mahogany; 4 magnificent Druggists' Bent Counter show Cases; Window Enclosures; a number of Carboys; only suitable for a first-class shop; to be sacrificed; also the entire Fittings of a first-class Chemist's Shop to be sold in one lot. Edwards & Pothergill, Old Haymarket, Liverpool.

APPRENTICESHIPS.

1s. 6d. for fifty words; 8d. for every 10 words beyond.

WANTED, to apprentice a youth (indoor), aged 16½ years, who has passed the Preliminary examination in Arts at the Apothecaries' Hall. Address, J. S., Ickfield House, Dunstable, Beds.

WANTED, Apprentice, Turnover, or Improver for Mixed country business; healthy locality; if passed Preliminary examination preferred. Richardson, Chemist, Hadfield, near Manchester.

APPRENTICE.—Mr. Kingan, Pharmaceutical Chemist, 63 Lupus Street, S.W., has an immediate vacancy for a well-educated Youth as above; every facility for acquiring a thorough knowledge of the business; comfortable home; moderate premium.

APPRENTICE wanted in high-class business, North London; comfortable home, and every opportunity given to a well-educated and gentlemanly youth; premium required, £40. "Xena," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TO LET.

1s. 6d. for fifty words; 8d. for every 10 words beyond.

FIRST-CLASS position for a good Drug Store; shop and basement, 18 Railway Approach, London Bridge. Apply to Fletcher Jones, Esq., 9 Old Jewry Chambers, E.C.

BOURNEMOUTH EAST, Castle Court Boscombe Chine.—Select Boarding Establishment, commands magnificent views of public gardens, the bay, Purbeck Hills, Isle of Wight, &c.; five minutes from pier and busses; liberal table; terms moderate and inclusive. Mr. and Mrs. J. D. Hazard, Proprietors and Managers.

TO **CHEMICAL MANUFACTURERS**—To be Let, in Cable Street, St. George's-in-the-East, a large Block of Buildings, suitable for a warehouse or factory, about 50 ft. square, with a floor space of 17,500 superficial feet; there are manager's residence, mess-room, and foreman's residence, and about 8,000 superficial feet of land available for further buildings; rent on lease £300 per annum. Further particulars of Mr. J. C. Collier, Agency Offices, Godalming.

SITUATIONS OPEN.

3s. 6d. for fifty words; 8d. for every 10 words beyond.

JUNIOR, at once. Particulars to Judd & Co., Lcamington.

WANTED Assistant (indoors) for smart Retail; good Counterman and Dispenser. Freke, 378 Coldharbour Lane, Brixton, S.W.

WANTED, early in June, a qualified and competent Assistant, for Branch. Apply, with full particulars, Lloyd, Chemist, Colwyn Bay.

ASSISTANT (Junior) for a good Dispensing and Retail business, immediately. Full particulars to J. Baily & Co., Chemists, Margate.

IMPROVER; outdoors; good opportunity for gaining experience in Dispensing. Apply, with full particulars, to Hughes, Chemist, Altrincham.

PARIS.—Assistant wanted, immediately who can speak French; one knowing French pharmacy preferred. Apply to M. Fongiat, 91 Avenue Kléber, Paris.

WANTED, at once, an Assistant, capable of taking charge of a Drug Store in connection with a grocery business. Full particulars to H. Martlett, Totland Bay, I.W.

WANTED, Junior (outdoors), well up in Dispensing and Counter. Apply, stating age, experience, and salary required, to H., care of Goodall, Backhouse & Co., Leeds.

NATHANIEL SMITH & CO., Cheltenham, require an indoor Assistant of good experience in Dispensing; qualified; applicants will please state height, age, &c.

WANTED a qualified Manager; married; to live on premises; Mixed business; prescriber and tooth extractor essential. Send reference and terms to H. B. Pate, Bolton.

WANTED, immediately, Junior or Improver in a Light Retail business with some Wholesale, indoor or preferred; an interview desirable. B. Drew & Co., 277 Borough High Street, S.E.

A **N** Assistant, about 21 years of age, accustomed to a country business. State full particulars as to age, salary, experience, with reference, to H. Bartoo, Pharmaceutical Chemist, St. Ives, Hunts.

A **QUALIFIED** man, as Assistant (indoors); age not under 50; salary small; duties light. Apply, by letter, stating full particulars, and lowest salary, to H. S., 52 York Road, Battersea, S.W.

JUNIOR or Improver, accustomed to a Mixed Country Retail business. Apply, stating salary required, and enclosing carte, to Arthur Cartton, Chemist and Druggist, 18 Long Causeway, Peterborough.

JUNIOR or Improver, at once; must be reliable and trustworthy; also respectable and well-educated Youth as Apprentice (indoors); moderate premium; home comforts. R. Prust, Chemist, Roath, Cardiff.

WANTED, June 1, an Improver, aged 18 to 19, who can be recommended (indoors) for a good-class country trade with some light agricultural business, house easy. Address, Hobson Key, Chemist, Monmouth.

EARLY in June, for Mixed Country trade; thoroughly competent and reliable Assistant; undeniable references will be required. State age, salary (indoors), and full particulars, S. Smith, Chemist, New Swindon.

EDWIN HALL, Weston-Super-Mare, requires a qualified Assistant as senior, indoors. Apply, stating age, height, salary required, and full particulars as to experience, and enclose carte, which will be returned.

A **energetic Traveller,** having experience among the Medical Profession, required immediately. Apply, with full particulars, to Wm. Forbes & Co. (late Thomas Hopkinson & Co.), Park Street, Nottingham.

WANTED, for the beginning of June, Junior or Improver for Light Retail Dispensing business in the Midlands; knowledge of H. osteopathy preferred. Apply, with usual particulars, T., c/o Messrs. Evans, Son & Co., Hanover Street, Liverpool.

WANTED, qualified Assistant, to act as manager for widow; Light Retail and Prescribing, must be steady and trustworthy; state salary (indoors), and when at liberty. Address, Dr. Macanlay, Kingston Villa, Halifax.

LOWESTOFT.—By May 30, qualified Assistant; good reference indispensable; letters unanswered in three days considered declined. Recent photograph desired if practicable. Apply, Clarke, Lowestoft, Pharmaceutical Chemist and Dental Surgeon.

WANTED, at once, Assistant for a few months; liberal time allowed for study and lectures, comfortable home; easy access to the Square and Schools; good-class Retail and Dispensing business. Apply, stating age, &c., to J. Hessel, 143 Highgate Road, N.W.

IMMEDIATELY.—Steady, active Indoor Assistant, about 24, as Senior in a good-class country business; one seeking a permanency preferred. Apply, with full particulars as to age, height, experience, salary required, and enclose photo, Dixon, Chemist, East Grinstead.

PART-TIME.—Wanted, a good Junior for Wednesdays and Fridays, from 2 P.M., and alternate Saturdays from 8 P.M., London, S.E., near Wilks. Please state age and terms (which must be moderate), to G. M. D., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

AT ONCE, Junior (indoors); about 21; good-class Country business; seaside; time for study and assistance given for Junior; no Sunday duty; state age, height, salary, and usual particulars, enclosing photo (to be returned). F. C., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SOUTH AFRICA.—Wanted, an Assistant holding Minor qualification; age not under 25; good Dispenser, 3 years' agreement, second-class passage paid out. Apply, "Export Department," S. Maw, Son & Thompson, Aldersgate Street, London. Personal interview necessary.

WANTED, at once, or as early as possible, a Young Man, with some knowledge of Dispensing, wishing to improve himself; business consists entirely of good-class dispensing, with no retail; small salary; good home offered. Write Manager, Medical Dispensing Company, Hotel Street, Leicester.

WANTED, immediately, for Mixed business, a competent Assistant; indoors, must be a good Dispenser and Counterman; satisfactory references required, afternoon and evening off weekly, no Sunday duty. Apply, stating age, salary required, references, &c., to J. B., Chemist, 10 Albert Road, Wines.

EARLY in June, Junior Assistant (indoors); accustomed to Prescribing and Dispensing and General Country Retail; one only kept, good references indispensable. State age, height, salary required, and usual particulars, with recent photo (to be returned), to A. Worts, Hamlet, Harwich, Essex.

IMPROVER wanted in a large good-class Dispensing and General business; must be active, industrious, and intelligent, able to wrap up quickly and neatly and to serve at counter when required; no one need apply who cannot produce unexceptionable references. Full particulars, enclosing carte, John Kemp & Co., Chemists, Lincoln.

JUNIOR (20h); 4 years' good experience; disengaged; reference.
Particulars from Cleve, Roubaix.

AS Junior Assistant or Improver (qualified); aged 24; 2 years'

If you have no surplus stock to Advertise just now, keep this Form for future use.

A WELL-ESTABLISHED Agent in Berlin, who has been working that market for ten years, in Drugs, Chemicals, Dyewoods, Oils, and other foreign produce, is open to take up the agency for Berlin, for a firm in England (if possible, a German house), who are specialists in Crude Iodine, Dyewoods, or China Galls. Advertiser wishes to represent no other than a really first-class house, obtaining its goods first-hand; he can give the very best references, and possesses excellent business relations. Letters to be addressed to "Berlin," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

NATURAL MINERAL WATERS

Packing
Free.

INGRAM & ROYLE,

Packing
Free.

LONDON—52 Farringdon St., E.C.

LIVERPOOL—19 South John Street.

SOLE IMPORTERS OF



VICHY

(STATE SPRINGS)

VICHY

ÆSCULAP, CARLSBAD, CARLSBAD SALTS, LA-BOURBOULE, ROSBACH, VALS, &c., &c.

NAME.	Per Dozen.		Original Packages.				NAME.	Per Dozen.		Original Packages.			
	Bots.	½ Bots.	Bottles.	½ Bottles.	½ Bottles.	½ Bottles.		Bots.	½ Bots.	Bottles.	½ Bottles.	½ Bottles.	½ Bottles.
Æsculap	15/	12/	25	30/	50	50/	Levico	15/	15/	40	36/	40	25/
Apollinaris	6/3	5/	50	25/	100	39/	Pullna	12/	8/	50	25/	50	25/
Bourboule (La) ..	11/	..	50	42/	..	..	Rosdorf	6/	5/	50	24/	100	36/
Carlsbad	12/	..	50	40/	..	..	Rosbach	6/	5/	50	24/	100	36/
Condal .. .. .	..	14/	..	..	50	56/	Royat	9/	..	50	34/	..	..
Contrexeville ..	9/	..	50	35/	..	..	Rubinet	15/	9/	25	30/	50	36/
Flitwick	24/	15/	..	..	..	..	St. Galmier ..	6/	..	50	22/	..	..
Franc-Josef .. ..	..	11/	..	50	42/	..	St. Marc	11/	..	50	22/	..	..
Friedrichshall ..	13/	10/	25	25/	50	40/	Selters	6/	4/6	50	24/	50	17/
Hunyadi-Janos ..	15/	13/	25	30/	50	50/	Vals	8/6	7/6	50	33/	50	29/
Johannis-Brannen	6/	4/6	50	22/	100	35/	Vichy (State Springs) ..	8/6	7/6	50	33/	50	29/
Kronenquelle ..	10/	..	50	40/	..	..	"Celestins," "Grande-Grille," &c.	..	..	..	..	..	..

 CARRIAGE PAID to any RAILWAY STATION in the UNITED KINGDOM. 

DETAILED PRICE LIST AND PAMPHLET ON APPLICATION.

"PREMIER BRAND" ESSENTIAL OILS.

Concentrated Fruit Essences—Soluble

MANUFACTURED BY

JOHN CUMMOCK

Who has received Hundreds of Unsolicited Testimonials, also THREE GOLD MEDALS,
besides other Honours.

Chemists manufacturing their own Aërated Drinks should write for Prices and Samples of the following:—

ESSENCE "SPARKLING LIMETTA"—Soluble "Essence of Lemon"

ESSENCE "LEMON SQUASH"—Essence for Sherbet

ESSENCE "TONIC HEADING"—Essence for Ginger Ale

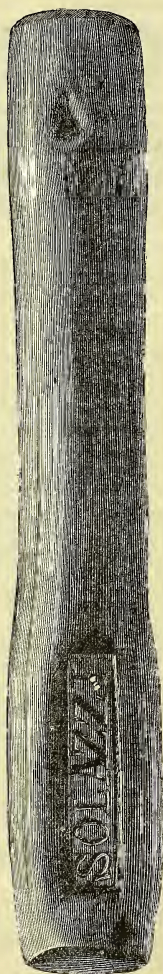
AND COMPARE WITH OTHER MAKERS.

Manufactory & Offices: 45 ROPE WORK LANE, GLASGOW.
LATE 32 MAIN STREET.

COUGHS, COLDS, &c.

PURE UNADULTERATED LIQUORICE

One of the Best Soothing Agents or Demulcents known.



"HEALTH" says:—"By far the best and purest is **SOLAZZI**."
"THE CHEMIST AND DRUGGIST" says:—"The most esteemed of all is **SOLAZZI**."

THE BEST OF ALL WHOLESALERS.

EIGHT PRIZE MEDALS AWARDED.

GOODALL'S HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each.

GOODALL'S BAKING POWDER.

The Best in the World. 1d. Packets; 6d., 1s., 2s., and 5s. Tins.

GOODALL'S EGG POWDER.

One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s., and 5s. Tins.

GOODALL'S CUSTARD POWDER.

Delicious Custards without Eggs. In Boxes, 2d., 6d., and 1s. each.

GOODALL'S BLANCMANGE POWDER

Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

GOODALL'S QUININE WINE, B.P.

Best Tonic yet Introduced. Bottles, 6d., 1s., and 2s. each.

GOODALL'S GINGER-BEER POWDER.

Makes the Best Ginger-Beer. Packets, 3d. and 6d.

GOODALL'S BRUNSWICK BLACK.

For Painting Stoves, Grates, Iron, Tin, &c. 6d. and 1s. Bottles.

GOODALL'S LAVENDER WATER.

A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

GOODALL'S PLATE POWDER.

For Polishing and Cleaning all Metals. Boxes, 6d., 1s., and 2s.

GOODALL'S JELLY SQUARES.

Like a Delicious and Nutritious Jelly. In 1-pint, 1-pint and Quart Boxes, 3d., 6d., and 1s. each.

PROPRIETORS—GOODALL, BACKHOUSE & CO., LEEDS.

PATENT MEDICINES AND DRUGGISTS' SUNDRIES.

Monthly Price List of Patent Medicines, Druggists' Sundries, &c., will be sent post free on application to

GOODALL, BACKHOUSE & CO., LEEDS.

THE VIKING FOOD & ESSENCE CO.

HAVE REMOVED THEIR CITY ADDRESS TO

3 WEST STREET, FINSBURY CIRCUS, E.C.,

Where all orders and communications should be addressed. Their New Factory at Camden Town is nearly complete, and is being fitted with new and improved appliances for turning out

THE MOST PERFECT MEAT PREPARATIONS FOR INVALIDS.

VIKING BEEF TEA JELLY.

VIKING ESSENCE OF BEEF.

VIKING PURE BEEF TEA.
(Concentrated).

**VIKING
INVALID TURTLE SOUP.**

VIKING MEAT LOZENGES.

**VIKING
"LIEBIG'S" EXTRACT.**

**VIKING
TURTLE CONSOMMÉ**
(Clear Soup).



The British Medical Journal
says :

"The Preparations of this Company are pure and of very high quality."

The Lancet says :

"These Preparations seem to us as good as they could possibly be."

FROM THOMAS BOND, F.R.C.S.,
M.B., B.S., LONDON, Surgeon to
Westminster Hospital, 7 The Sanctuary,
Westminster Abbey.

"I have much pleasure in stating that I have used the Viking Essence of Beef and the Invalid Turtle Soup among my patients. I have found them meet with universal approbation. I can state from my own experience that the Turtle Soup is the most delicious food I have ever met with for the sick-room; it is easily digested, and generally taken with relish, even when the appetite is most capricious. The Essence of Beef appears to me to be a thoroughly good and nutritious food."

[1]

The whole of the above articles are strongly recommended by the Medical Profession for Invalids. They are of the highest class and guaranteed perfectly pure, those preserved in GLASS being free from all risk of metal contamination, and therefore especially suitable for delicate persons.

These goods are packed in a tasteful and attractive style, and the reduced prices quoted enable our customers to sell at a lower price (and at the same time retain a substantial profit) and supply goods which Consumers will always ask for again.

THE VIKING BRAND IS A GUARANTEE OF STRENGTH & PURITY

HALL'S COCA WINE

A HIGH-CLASS MEDICATED WINE AT A REASONABLE PRICE

THE LATEST TESTIMONY TO THE EXCELLENCE OF
HALL'S COCA WINE.

"The Lancet," April 9th, 1892.

HALL'S COCA WINE (STEPHEN SMITH & CO., BOW, E.)

This is an excellent Wine, with an alcoholic strength equal to good port, possessing a similar flavour and bouquet, but associated with it also is the peculiar though pleasant aroma of the fresh Coca leaf. Ether when shaken with the Alkalised Wine yielded a residue on evaporation which with hydrochloric acid gave characteristic Crystals of Cocaine hydrochlorate; they were further identified by the numbing effect produced by the Crystals when rubbed on the tip of the tongue. Analysis gave the following data: Alcohol, 15 per cent. by weight, 18.50 per cent. by volume; total solid matter, 18.73 per cent. (sugar and coca principles); mineral matter, 0.33 per cent. The restorative and invigorating properties of the Coca leaf are now well known, and it may be very conveniently and palatably administered in the form of an agreeable Wine such as that under examination, a wineglassful of which is stated to contain one drachm of the soluble active ingredients of the leaves.

STEPHEN SMITH & CO., BOW, LONDON

SPIKING'S MALT NURSERY BISCUITS

FOR INFANTS AND INVALIDS.

NOURISHING, STRENGTHENING, AND FLESH-FORMING.

"Spiking's Malt Biscuits are an admirable article of dietary for use in the Nursery or Sick Room."—*British Medical Journal*, May 16th, 1888.

RECOMMENDED BY THE MEDICAL PROFESSION.

SPIKING & CO.

Bakers to Her Majesty and H.R.H. the Prince of Wales,

5 DOVER ST., PICCADILLY; 24 ECCLESTON ST., BELGRAVIA; 116 BROMPTON ROAD, LONDON.
AND OF ALL WHOLESALE HOUSES.

KEEPS GOOD IN ALL
CLIMATES.

WHITE AND ODOURLESS.

Old or damaged stock ex-
changed for fresh goods.

G. & G. STERN,



Pamphlets for distribution
and Show Cards sent free on
application.

PRICE TO THE TRADE.

Bottles	1/	2/	5/
Per doz.	9/6	19/	47/6
Per gross	105/	210/	525/

62 Gray's Inn Road,
LONDON, W.G.

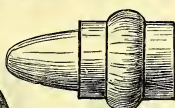
PETER TYRER'S MENTHOL

GOOD
VALUEGOOD
VALUE

FIG. A.



FIG. B.



REVERSIBLE.



5/6

BOTTLE.



VASE.



PEDESTAL.

TYRER'S SPECIAL 1d. BOTTLE at 5s.

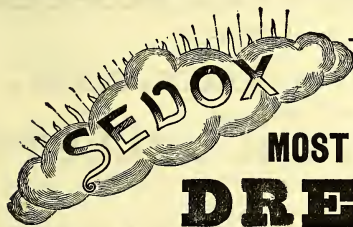
- 1d. { Assorted, Bottle, Pedestal, and Reversible or Vase. } 8/- gross. 2d. { Fig. A, Stained, and Fig. B, Varnished } 12/- gross. 3d. { Fig. C, Barrel, Polished Willow, and Fig. F, Draughtsman, Stained and Varnished } 16/- gross. 1d. and 2d. on 4-gross beautiful Show Cards, WITH ELASTIC. [4]

For sums under £1 please remit Postal Order, not CHEQUE, and oblige. All Goods free to Rail or Docks in London, for Cash against Invoice. SAMPLES OF ANY POST FREE ON RECEIPT OF BUSINESS CARD.

PETER TYRER, 70 LONG LANE, BOROUGH, LONDON, S.E.

Also through W. & C. Pantin, Burgoyne & Co., Jos. Travers & Sons, Evans, Sons & Co., Droitwich Salt Co., Geo. Startin, Henderson & Liddell, Hoven den, Newbery, Barclay, Sanger, May Roberts, Heaton Squire, Sutton, Edwards, and all Wholesale Houses.

PROTECTED BY
LETTERS
PATENT.



THE

MOST ABSORBENT DRESSING

EVER INTRODUCED.

This Dressing is unlike any other in the Market, being prepared from a pure Vegetable Fibre, and besides being a very rapid absorbent it will take up **FIFTEEN TIMES ITS WEIGHT OF LIQUID.**

SEDOX

Is supplied impregnated with any Antiseptic Solution required, and guaranteed that every particle is equally impregnated.

SEDOX

Is admitted by some of the most eminent Medical Men to be the Cleanest, most Absorbent, and most Efficacious Dressing known.

SEDOX

Can be obtained in almost every form in which Absorbents and Antiseptics are used.

THE SEDOX MANUFACTURING Co.
12 OAT LANE, LONDON, E.C.

DRUGGISTS' CONFECTIONERY.

MESSRS.

ROBERT GIBSON & SONS,

CARLTON WORKS, MANCHESTER,

And No. 1 GLASSHOUSE YARD, ALDERSGATE ST., LONDON,

Have now completed their **EXTENSIVE ALTERATIONS**, New Machinery and the most modern Appliances making their works the most complete of the kind in the Kingdom.

GLYCERINE PASTILLES,

One of their Specialties, but with the demand for which they have hitherto been unable to cope. They will now be in a position to send out in any quantities, and buyers need no longer fear having half quantities sent.

GIBSON'S WORLD-RENOWNED

BOILED SUGARS

Plant and Machinery equal to a producing power of 1 Ton per day.

COMPRESSED PELLETS.

ALL KINDS IN ANY QUANTITIES.

CHLORATE OF POTASH PELLETS

IN 1-OWT. ORIGINAL BARRELS. BARRELS FREE.

HIGH-CLASS LOZENGES

OF EVERY DESCRIPTION.

**TROAT HOSPITAL LOZENGES, COUGH LOZENGES,
VOICE LOZENGES, TOP-NOTE PRODUCERS, &c., &c.**

Indents from abroad, marked "GIBSON," may be sent to any Wholesale Drug or Shipping House in the Kingdom.

Price Lists sent on application to

ROBERT GIBSON & SONS, Carlton Works, MANCHESTER.

Telephone Number. 1852.

Telegraphic Address—CHEMICUS LONDON.

ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS.

INDEX TO ADVERTISEMENTS APPEARING IN THIS ISSUE.

NOTE.—The Folios shown in this Index are those at the FOOT of the Page, and not at the Top. This arrangement is necessary in order to meet the requirements of the Post Office.

Foot of Page		Foot of Page		Foot of Page		Foot of Page	
Aome Chemical Co.	47	Rade's Pills	57	Lincoln Drug Co.	46	Sainsbury, S.	57
Allen & Hanbury	Front Cover	Kilman, Sims & Co.	Text 696	Liquor Olanis Co. (Lim.)	39	Saunders, The Co. (Lim.)	Text 696
Apollinaris Co.	Outside Cover	Elliott & Co.	57	Liverpool Lint Co.	44	Schacht, Giles, & Co.	40
Asch, R. & Co.	1	Epps, J. & Co.	29	Lofthous & Saltmer	38	Schell, J. & Co.	Text 696
Baker, R. & Co.	17	Eschmann, J. & Co.	14	London and Lancashire Fire Insurance Co.	Text 696	Schweppe & Co.	Text 696
Barnett & Foster	17	Exchanges Column		London Homoeopathic Hospital and Medical School	4	Sears, F. W.	7
Barron, Harveys & Co.	44	Fieldwell, J.	8	Lorenz, H.	5	Seox Manufacturing Co.	23
Baxter & Co.	11	Fergusson & Forster	56	Lynch & Co.	Outer	Singleton & Cole	23
Berrie & Co.	11	Fink, F. & Co.	20	Maw, S. & Thompson	Outer	Smith, S. & Co.	22
Berkfeld Filter Co.	18	Fletcher, Fletcher & Stevenson	Text 696	May & Baker	Cover	Snodgrass & Sons	45
Berkley, J.	16	Fletcher Bros. & Co.	Text 696	May & Roberts & Co.	15	Snodgrass & Sons	45
Berke & McKeen	16	Fluret, B.	57	Melin, J.	18	Southwell & Co.	4
Bideau & Co.	35	Forst, Shapland & Co.	42	Miller, A., & Co.	18	Sotio & Andrioli	12
Blyton, Astley & Co.	32	Forster Bros.	42	Mills & Co.	18	Spratts Patent (Lim.)	51
Boehm, F.	50	Gaityett's	38	Morin, J. & Co.	18	Staples Bros. & Co.	48
Boord & Son	50	Goodall, Backhouse & Co.	20	Mullens, F.	55	Stern, G. & Co.	22
Boots' Pure Drug Co. (Lim.)	42	Grindley & Co.	12	Murphy, J.	55	Stevenson Glass Co.	22
Bowdler & Co.	30	Gu's Tonic Co.	11	Mumford, G. S.	Text 696	Stipendium Stepper Co.	50
Bowers Bros.	14	Halviva, The Co.	46	Natali, R.	Text 696	Taddy & Co.	23
Bradley & Co.	14	Harewood, James	57	Newball & Mason	16	Taylor, A. J. & Co.	56
Bradley & Co.	4, 56	Henson, W. J.	42	Newbald & Mason	16	Teele, A. L.	6
Brattin, E. & Co.	53	Herschel, G. M.D.	57	Newsholme, G. T. W.	6	Tidman & Son	54
Brett, F. J.	Coloured Supplement	Hidelson, J.	35	Oakley, J. & Son	48	Togues, J.	55
Brown, J. & Co.	4, 56	Hill, J. & Co.	35	Offitger, E.	48	Treat, R. C.	13
Burn, H.	56	Holroyd, J. & Co. (Lim.)	51	Orme & Co.	6	Treble, W. & Co.	47
Burroughs Bros.	57	Horn & Son	56	Orme & Co.	6	Truitt, H. & Co.	10
Burrows, J. & Co.	57	Hudson & Co.	56	Orridge & Co.	Coloured Supplement	Turnbull & Warr	50
Burroughs, Wellingco	33, 74	Idenden, A. E.	56	Palfray, T.	48	Tyler, H. & Co.	23
Bush, A. P. & Co.	Front Cover	Iris & Co.	57	Pascal, J.	49	Tyrer, P.	43
Businesses, J. & Co.	57	Isaacs, I. & Co.	57	Pearce & F.	48	Vaccine Association	23
Butcher, W. & Son	47	Isaacs, I. & Co.	57	Petersen, M., & Co.	47	Viking Food Co.	21
Cadbury Bros.	Cover	Isaacs, I. & Co.	57	Pontifex & Wood	30	Walker & Dalrymple	48
Canvey, F. O. & Co.	10	Isaacs, I. & Co.	57	Potts, H. & Co.	35	Walker & Trear & Co.	48
Carroll & Co.	56	Isaacs, I. & Co.	57	Powell & Barstow	36	Warriok Bros.	Text 693
Cheesbrough Manufacturing Co.	34	Isaacs, I. & Co.	57	Price's Candle Co. (Lim.)	10	Washington Chemical Co.	46
Christy, T. & Co.	34	Isaacs, I. & Co.	57	Pryn-a-Candle Co. (Lim.)	52	Watson, W. & Sons	37
Chry, D. & Co.	38	James, W. H.	57	Raines & Co.	41	Weighted Scale Co.	35
Cooking & Co.	12	Jaucke, W.	57	Richardson, J. & Co., Leicester	16	Werner & Friedlander	30
Crocker & Co.	Coloured Supplement	Johnson & Jorgensen	46	Robert Freres	23	West, T.	44
Cummock, J.	19	Johnson & Jorgensen	46	Robinson, B.	23	Westminster College	6
Darton, F. & Co.	56	Jones & Co.	56	Roekelee, J.	48	Wilson	44
Deane & Co.	13	Kalodant	55	Roy, J. & Co.	48	Wolstencroft & Co.	66
Dee Oil Co. (Lim.)	56	Leo & Co.	45	Roy, J. & Co.	48	Woodward	4
Delaware, C.	42	Leverson & Co.	46	Roy, J. & Co.	48	Wooley, Sons & Co.	64
Dodge & Elliott	37	Liebig Co.	25	Roy, J. & Co.	48	Wright & Co. (Lim.)	54

CLASSIFIED LIST OF ALL ADVERTISERS

Whose Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear in the above Index are published in one of the other issues of this month.

ADVERTISING SPECIALITIES

Lawton, J. W. Teole, A. L.
BEATS & MINERALS
 Apollonaris Co.
 Barnett & Foster
 Chemist, Ltd. Water
 Association
 "The Bathing" [r'm
 Fletcher, Fletcher & Steven-
 son Joseph Co.
 Grolaten
 Hassell & Co. Hay, W.
 Jarvis Co.
 Ingram & Boyle
 Jewsbury & Brown
 Keith & Spring (Lime
 Mills & Co. (Boutrne)
 Sehnacht, W. J. & Co.
 Steele, J. & Co.
 Wilcox & Co.

BEST LAYNT
 (See STYRENS AND BARNINGS,
 Barnett & Foster
 Chemist, Ltd. (Lime)
 Grolat Freres
 Meyer, Hayward, & Co.

BEACHES ABOARD
 Austen, Alan J. & Co.
 Fulton, Grimwade & Co.
 Kempthorne, Prosser & Co.
 Lennon, E. G. & Co. (N.Z.,
 Ltd.)
 Murdoch, John, & Co.
 Peake, Allen & Co.
 Prosser, Taylor & Co.
 Roberts (Paris, etc.)
 Ross, Wm. & Co. (Mel-
 bourne)
 Sharland & Co.
 Reid, W. J. & Co.

ACETIC ACID
Fueret Bros.

Green, H. W., & Co.
Graham & Callahan (Sals)
ALCALOIDS
Howards & Sons (Cinchona)
Hunt, J. A., & Co.
ALMANACS
Ford, Shapland & Co.
Silverlock H.
Tornseund,
AMMONIA
May & Baker (Lim.)
Wells, J. & Co.
Woolley, Sons & Co.
APPARATUS
Olshaus, A.
Rosenfeld, & Co (Scientific)
Perken, Son & Raymond
Scott, H. & Co.
Wedgwood & Sons (Mortars)
BAKING POWDER
Goodall, Backhouse & Co.
BANDAGES
Hewitt, W. H., & Son
Robinson & Sons
Rothbue, F., & Co.
BATHS & CLOVES
Fattison, G.
BEESWAX
Barnard, J. & Sons
Bordwell, W. H., & Co.
Taylor, A. J., & Co.
BENZOIC ACID
Hewitt & Sons
Hewitt & Sons & France
Hewitt & Sons
Hewitt & Sons
May & Baker (Lim.)
Symes & Co., Tyrer, J., & Co.

BICARB. SODA
Brunner, Mond & Co. (Lim.)

Howards and Sons
 Janche, W. May & Baker (Lim.)
BOOKS
 Burroughs, Wellcome & Co.
 Chemists & Dispensary
 Hargreaves, Dr., Mr., & Co.
 Freshell, Dr., & Muter, Dr.
 "The Art of Perfumery,"
BORAX
 Mack's Starch
 Meier & Green
BOXES
 Auetin & Co. (Cardboard)
 Evans, Sons & Co.
 Farmer, J. W. & Co. (Lim.)
 Robinson & Sons
BOTTLES
 A. G. Golder & Co. (Lim.)
 Barnett & Foster
 Barrett, R. H.
 B. B. Finchcliffe (Lim.)
 Bredin's (Lim.)
 Bush, H. W., & Co.
 Evans, Sons & Co.
 Foreign Bottles Co.
 G. & Co. (Lim.)
 Hearn, R. A., & Co.
 Issac & Co.
 Johnson & Jergensen
 Kliner Bros.
 Lynch, R. & Co. (Toilet)
 M. B. Son & Thompson
 Poths, H., & Co.
 R. & Co. (Lim.)
 Thompson, Walters, Hoie &
 Co. (Lim.)
 Tockwood, W.
 "W. Brand Bottles"

BRUSHES
Evans, Sone & Co.

KENT, G. H., & Son
Boulton, J., & Co. (Lim.)
Boulton, J., & Co. (Lim.)
CAMPBELL
Fuerst Bros.
Howards & Sons
Kemp & Shwell (Homeopathic)
Mott & Baker (Lim.)

CATALOGUE
Maw, S., Son & Thompson
Newbery, F., & Son
Baker & Sons

CHEMICALS
Boehm, F.
Bourgeois, C. F., & Sohne
Boulton, J., & Co. (Lim.)
Brazner, J., & Son
Brazner, J., & Son (Lim.)
Fischer Fietcher & Stevens
Fischer Fietcher & Stevens
Goodall, Backhouse & Co.
Groff, E. W., & Co.
Hart, J. & Son (Clark)
Hart, J. & Son (Pharm.)
Levernore, Aug.
Lofthouse & Saltner
Lofthouse & Saltner
Maw & Baker (Lim.)
Morris & Galland
Moss & Co.
Smith, T. H., & Co.
Tucker & Co. (Fumills)
Tyke & King
Tyrer, J., & Co.
Washington Chemical Co.
White, A., & Sons

CAPSULES
Denoual, J. (Mediotnal)

Duncan, Flookhart & Co.
Evans, Sons & Co.
Hooper, B. & Co.
Mason, C. E. & Co.

FLORA PARADA
Duncan, Flookhart & Co.
Evans, Sons & Co.
Farrrie & Co. | Moss, J. & Co.

CASTOR OIL
A. H. Humberstone, Master
Christy & Co. (Aromaticum)
Green, M. W. & Co.
Humberstone, A. H. & Co. (Aromaticum)

CHEST PROTECT
Hockin, Wilson & Co.
Humberstone, A. H. & Co. (Aromaticum)
Lynch & Co.
Maw, S., Son & Thompson
N. & S. (Aromaticum)
Pattison, G. | Solpout Bros
Thompson, J. & Co. (Aromaticum)

CHEMOCRODINE
Davenport (Browne's)
Towle, A. P. & Son

CHEMOCRODINE LIME
Government Sanitary Co.
National Chemical Co.

CHEMOCRODINE, & Co.
Duncan, Flookhart & Co.
Green, M. W. & Co.
Krohn & Seegman (Admin)
Krohn & Seegman (Admin)
Mosefarian, J. F. & Son
Mosefarian, J. F. & Son
Wright, Layman & Unmy
Zimmerman, A. & H.

PETRO ACID
Krohn & Seegman (Admin)

COCAINE-HYDRO.

Howards & Sons
Coca Wine
Armbricht, Nelson & Co.
French Hygienic Co.
Mariani & Co.
Stephen Smith & Co. (Hall's)
Wilcox & Co. (Vin Mariani)
Caldwell & Co.
Caldwell Bros. (Christy & Co.)
Root & Co. (Lim.)
Korrmann & Co.

COOL-LIVER OIL

Allen & Hanbury
Broughs, Wellcome & Co.
Evans, Sons & Co.
Greiff, R. W. & Co.
Hill & Sons
Hickin, Wilson & Co.
Kathouse & Saltmer
Smith, T. J.
Southall Bros. & Barclay
Woolley, Sons & Co.

COFFEE

Celery Coffee
Brimington, T. & Co. (Coffee)
Essence

GOLD-SILVER TUBES

Betts & Co.

COMP. MEDICINES

Allen & Hanbury
Burton, Astley & Co.
Burroughs, Wellcome & Co.
Caerel Bros.
Hooper, R. & Co. J. Leo & Co.
Lyn & Co.
O'Brien, J. T. & Co.
Richardson, J. & Co.

SCENTED LIPS.

Evans, Sons & Co.
Fletcher, Fletcher & Stevenson
Glynn, T. H. & Co.

CONFECTIONERY

Burton, Astley & Co.
Gibson, K. & Sons
Guent, J. & Co.
Kerfoot, J. J. Pascoli, J.
Lynch, T. & Co.
Southwell, Co. & Co.
Warrick Brothers

CORN CURES

Paul, T.
Pattinson, G.

COTTON WOOL

Haynes, G. & Co. (Absorbent)
Harrison & Co. (Absorbent)
Sanger, J. & Co.
Seabury & Johnson (septic)
Hedox, Absorbent, and Anti-
Greshed Linseed

Graham, W. & Co.
Lumford, S. G.

DENTIFRICES

Barclay & Sons (Lim.)
Bechem, T.
Brookley, H. & Co.
Jewsbury & Brown
Lakeman, J. J.
Lynch, H. & Co.
Stevens, F. A.
Eaton, H. & Co.
Thompson & Capper
Warrick Bros. J. Wilson, A.
Wood, W. (Aron)

DISINFECTANTS

Calvert, F. & Co. and Co.
Fletcher Bros. & Co.
Government Sanitary Co.
Faulder & Co. (Lim.)
Jeyes' Fluid
National Chemical Co.
Sauter & Co.
Seabury & Johnson

DOG MEDICINES

Spratt Patent (Lim.)

DRUGGISTS' SUN.

Ayrton & Sandere
Barnes, F. & Co.
Barclay & Sons (Limited)
Beauclaire Co.

Bush, H. W. & Co.
Evans, Leasher & Webb
Fletcher Bros. & Co.
Fordham, W. R. & Sons (Lim.)
Gilbertson, H. & Sons
Hickin, Wilson & Co.

Iridis & Co.
Kay Bros. (Lim.)
Lynch & Co.

Maw, S. & Thompson
May, Roberts & Co.
Newbery, F. & Sons
Quelch, G. & Co.

Sanger & Sons
Selous & Co.
Serven, G.

Taylor, A. J. & Co.
Thompson, Walters, Hole & Co. (Lim.)

Tidman & Son
Toogood, W.
Wood, Vincent
Young, J.

DRUG GRINDERS

Jordan & Co.

DRUG MILLS

Burroughs, Wellcome & Co.

DRUMS

Berger, F.

EATY DE COLOGNE

Farins, J. M.
Martin, Maria (Nep)
Oscar, Monch & Co.

ELECTRO APPAR.

Darton, F. & Co.
Orme & Co.

EMBOCATION

Burn, H.
Day & Sons
Edmund, Sons & Co.

ENEMAS

Evans, Sons & Co.
Fanger & Son
S. V. Co.

ENGRAVERS

Barker, W. & Son
Corman

ESSENCES

Boeckh, W. I. Berger, F.
Booth & Son

Boulton, J. & Co.
Bourne & Son (Lim.)
Burgoyne, Burdicks & Co.
Bush, W. J. & Co.
Damm, J.

De Carle & Son
Godard, Hackhouse & Co.
Hay, W.

Iridis & Co.
May & Baker (Lim.)
Newball & Mason

Oldfield, Parsons & Co.
Stevenson & Howell
Tyler, F. (Anchovies)

Wright, T. J.
Woolley, Sons & Co.

ESSENTIAL OILS

Burton, Astley & Co.
Boehm, F.

Bush, W. J. & Co.
Damm, J.
Cooking & Co. (Japan Pepper)
Edwards & Co. (mint)

Dodge & Olcott
Evans, Sons & Co.
Hall, J. & Co.
Hodgkinson's, Treacher & Clarke

Largen, G. W.
May & Baker (Lim.)
Poppeler & Marks

Robert Freres
Smyth & Andriotti
Schlesinger, L.
Stevenson & Howell

Symes & Co.
Tombari Freres
Vogt, G. & Co.
Warrick Bros.

Wright, Layman & Umney

ETHER

Duncan, Flockhart & Co.
Edwards & Co.

May & Baker (Lim.)
Robbins, J. & Co.

White, A. & Sons
Woolley, Sons & Co.
Wright, Layman & Umney

EUCALYPTUS

Downie, H. L. P. Co.
Kaldon

Evans, Leasher & Webb
Fletcher, Fletcher & Stevenson

Vogt, G. & Co.

EXTRACTS, FLUID

Allen & Hanbury
Barber, G. & Co.
Burgoyne, Burdicks & Co.

Evans, Sons & Co.
Fletcher, Fletcher & Stevenson
Heaton, Suttie & Francis

Hooper, R. & Co.
Lynd, R. Howard & Co.
Moss & Co.

Foster & Clarke
Vogt, G. & Co.
Wright, Layman & Umney

EXTRACT MEAT

Australian Meat Co.
Brand & Co.

Bush's Liquid Beef
Dunlop, F. & Co. (Extract of Meat Co. (Lim.)
Iridis & Co. (Limb Co.)
Lynch & Co. (Limb Co.)
Mason, G. & Co. (Lim.)

FEEDING BOTTLES

Brellis, E. & Co. (Lim.)
Burgoyne, Wellcome & Co.
Burton, Astley & Co.

Curling, G. & Co.
Evans, Sons & Co.
Hearn, E. A. & Co.
Hickin, Wilson & Co.

Kilner & Co.
Lynch & Co.

Quelch, G. & Co.
May, Roberts & Co.
Maw, S. & Thompson

Thompson, Walters, Hole & Co. (Lim.)
Toogood, W.

EXTRACTS

Berkfield Filter Co.
Fordham, W. R. & Sons (Lid.)
Mawson, Swat & Waddell
Silicated Carbon Filter Co.

FOOD (Infants' & Invalids')

Allen & Hanbury
Baker, G. & Co.
Benger's Food
Brand & Fendler
Clarke's Food Warmer

Evans, Sons & Co.
Goodrich, Hackhouse & Co.
Heaton, Squire & Francis
Hickin, Wilson & Co.
Kinx, F. & Co. (Lim.)
Limb Co.
Muir, Charles Co. (Lim.)
Nestle, H.
Pura Beef Co.
Spiking & Co.

FLESH GLOVES

Pattison, G.

FLY PAPERS

Edmund, Sons & Co.
Bright

FORMULA

Brooks, T.

FRUIT JUICES

De Co. & Co.
Hay, W. (Esence)
Mills, R. M. & Co.

W. G. O. (Fruit)
Burton, Astley & Co. (Pastilles)
Boehm, F. I. Fink & Co.

Booth & Son
Greiff, R. W. & Co.
Lyn & Co.
Price's Candie Co.
Taylor, A. J. & Co.

GRANULAR PREP.
Bishop, A. & Sons
Evans, Sons & Co.
Heaton, Squire & Francis

Day, Sons & Hewitt (Veterinary)
Wright, Layman & Umney

GUM

Fink & Co. (Arabic, &c.)
Greiff, R. W. & Co.
Levermore, Alex. & Co.

Berger, F. A. J. & Co.
HAIR PREP.
Chesebrough, Mfg. Co.

Edwards & Co.
Truett, H. P. (Lim.)

HERE BEER BITS

Adams, J.
Newball & Mason

Oldfield, Pattinson & Co.
Herbals

Newball & Mason
Poppeler & Marks

COMPAGNIE
Epps, J. & Co.
Keene & Ashwell

Leath & Bone
Myers, G.
Thompson & Capper
T. Watson & Wate

HOSPITALS
London Homopathic

HYPOPHOSPHITES
Duncan, Flockhart & Co.
Fellows

Fletcher, Fletcher & Co.
Smyes & Co.
Tyler, Thomas & Co.

ICEBERGS
Burroughs, Wellcome & Co.
Clarke's Inhaler

Edwards & Wilson & Co.
Lynch & Co.
Maw, S. & Thompson

Stearns, Co. (The)
Toogood, W.

INKS (FOR MARKING INKS)
Bentley & Draper

INSECTICIDES
Keating, T.
Maw, S. & Thompson

STEINER & Co.

INSURANCE

London and Lancashire Fire
Insurance Co.

ESTORCH
Tyler, F.

LEA
Armbricht, Nelson & Co.

LANOLINE
Christy, T. & Co.

LARD
Even, J. & Sons

LIME JUICE
Iridis & Co.
Kiddell, A. & Co. (Stowers')

LINT
Haynes, G. & Co.
Kerfoot, J. & Co.

Maw, S. & Thompson
Newcombe, G.

Evans, Sons & Co.
Fletcher & Johnson

LEATHER
Fuerst Bros.

LOZENGES
Allen & Hanbury
Burton, Astley & Co.

Gibson, R. & Sons (Mamra).
Hickin, Wilson & Co.

Kerfoot, T. Pascoli, J.
Raines & Co.

MACHINERY
Bennett, Sons & Bhears
Burroughs, Wellcome & Co.

Edwards & Norman, Ltd.
Mawson, Swat & Waddell
Pontefract & Wood (Lim.)
Schlack, F. W.
Warner & Fendler

MAGNESIA
Bush, W. & Son & Co.
Edwards & Wilson & Co.
Greiff, R. W. & Co.
Henry, F. & W. (Unalmed)
Hill & Son
Kerfoot, T. (Ultrase)
Wheatman Chemical Co.

MANICURE PREP.
Dr. Paul's

MALT EXTRACT, &c.

Allen & Hanbury
Bealy, R. & Co.

Edmund, Sons & Co.
(Kieper's)

Drysdale & Co.
Heaton, Squire & Francis

Raines & Co.
Edwards & Wilson & Co. (Biscuits)
Wyleys & Co.

MARFING INKS
Barber, G. & Co. (Ink)
Deakin, John (Crystal Palace)
(Ink and Pencils)

Perry & Co. (Pen)
MEDICATED PAPER
Richards, J. M.

MEDICINE CHESTS
Burroughs, Wellcome & Co.
Day, Sons & Hewitt (Veterinary)
Dav & Sons (Veterinary)

METFORM
A. J. Menhol, Depoh, A. W.
Bartley, Proprietor,
Selling & Co.

E. A. S. Sons & Co.
H. Ekin, Wilson & Co.
Seabury & Johnson

Thompson, Walters, Hole & Co. (Lim.)
MICROCUREALS
Fuerst Brothers

Edwards & Wilson & Co.
May & Baker (Lim.)
Tyler, Thomas & Co.

MILK
Hickin, Wilson & Co.

MIXING MCHNRY
Gardner, W.

MORPHIA
Macfarlan, J. F. & Co.
Smith, T. H. & Co.

OILS, PAINTS, &c.
Darton, F. & Co.
Edwards, G. F. W. (Slides)
Perken, Son & Hayman

MILK
Hickin, Wilson & Co.

MIXING MCHNRY
Gardner, W.

MORPHIA
Macfarlan, J. F. & Co.
Smith, T. H. & Co.

OILS, PAINTS, &c.
Darton, F. & Co.
Edwards, G. F. W. (Slides)
Perken, Son & Hayman

MILK
Hickin, Wilson & Co.

MIXING MCHNRY
Gardner, W.

MORPHIA
Macfarlan, J. F. & Co.
Smith, T. H. & Co.

OILS, PAINTS, &c.
Darton, F. & Co.
Edwards, G. F. W. (Slides)
Perken, Son & Hayman

MILK
Hickin, Wilson & Co.

MIXING MCHNRY
Gardner, W.

MORPHIA
Macfarlan, J. F. & Co.
Smith, T. H. & Co.

OILS, PAINTS, &c.
Darton, F. & Co.
Edwards, G. F. W. (Slides)
Perken, Son & Hayman

MILK
Hickin, Wilson & Co.

MIXING MCHNRY
Gardner, W.

MORPHIA
Macfarlan, J. F. & Co.
Smith, T. H. & Co.

OILS, PAINTS, &c.
Darton, F. & Co.
Edwards, G. F. W. (Slides)
Perken, Son & Hayman

MILK
Hickin, Wilson & Co.

MIXING MCHNRY
Gardner, W.

MORPHIA
Macfarlan, J. F. & Co.
Smith, T. H. & Co.

OILS, PAINTS, &c.
Darton, F. & Co.
Edwards, G. F. W. (Slides)
Perken, Son & Hayman

MILK
Hickin, Wilson & Co.

MIXING MCHNRY
Gardner, W.

MORPHIA
Macfarlan, J. F. & Co.
Smith, T. H. & Co.

OILS, PAINTS, &c.
Darton, F. & Co.
Edwards, G. F. W. (Slides)
Perken, Son & Hayman

MILK
Hickin, Wilson & Co.

MIXING MCHNRY
Gardner, W.

MORPHIA
Macfarlan, J. F. & Co.
Smith, T. H. & Co.

PERFUMERY

Barclay & Sons, Lim.
Sayer & Co.

Seabury & Johnson
Blondeau & Co.

Brooks, T. (Solid Perfume)
Burroughs, Wellcome & Co.

Bush, H. W. & Co.
Cavallier Freres
Chesebrough Mfg. Co.

Edwards & Wilson & Co.
Ewen, J. & Sons
Korrmann & Co.

Giraud Fils
Greenhill, T. S. & Son
Leard, J.

Mulhens, F.
Nelson, Sons (Berdoo's)
Offinger, E.

Pears Soap
Price's Patent Candie Co.
Robert Freres

Sommarive, Manufo, Co.
Sainsbury, S. (Lav. Water)
Schlesinger, L.

Thompson, Walters, Hole & Co. (Lim.)
Socio & Andriotti

Thompson, Walters, Hole & Co. (Lim.)
Tidman & Son

Tombari Freres
Treast & Co.

Truett, H. P. (Lim.)
West, T. (O'Kell's Moss)
Woolley, Sons & Co. (Powder)

PETROLEUM
Hickin, Wilson & Co.

PHARM. PREPS.
Allen & Hanbury
Baron, Harvey & Co.

Berger, F. & Co.
Boehm, F.

Booth & Son
Booth & Son

Booth & Son
Booth & Son

Booth & Son
Booth & Son

Booth & Son
Bo

PILLS (Coated, &c.)

Allen & Hanbury
Anderson Apothecaries' Hall
Beecham, Thomas
Eade's Gout Pills
Evans, Sons & Co.
Hearson, Squire & Co.
Ull, A. S., & Son (Borroway)
Lloyd, T., Howard & Co.
McKeehan & Robbins
Morrison's
Newbery & Sons
Richardson, J., & Co.
Vand, S. (Pearl Confection)
Warner, W. H., & Co. (Coated)
Wyllys & Co.

PODOPHYLIN, &c.

Keith, B., and Co.
Smith, T. H., and Co.

POULTRY FOOD

Spratt's Patent (Linn.)

PRINTING

Bowers Bros.
Cowan, J. R. (Glass)
Ford, Shapland and Co.
Greenlock, H. Townsend.

PUMELINE

Stern, G. and G.
Quinine Salts

Boehringer, R. F., & Sohne
Greiff, R. W., & Co.
Howard and Sons
Zimmermann A. & M.

RESPIRATORS

Newbery, P., & Sons

SACCHARIN

Allen and Hanbury

Burroughs Bros.

Burroughs, Wellcome and Co.

SCHOOLS, &c.

City School of Chemistry and

Liverpool School of Pharmacy

London Homeopathic and

Medical School

Manchester Coll. of Pharmacy

Northern School of Pharmacy

Sheffield School of Pharmacy

South London School of

Pharmacy (Linn.)

The School of Pharmacy

Westminster College

SALICIN

Macfie and Co.

Smith, T. H., and Co.

SALICYLIC ACID

Burroughs, Burbridge and Co.

Forest Bros.

Zimmermann, A. and M.

SALT

Stern, G. and G. (Peppals)

SAUCES, PICKLES

Goodall, Backhouse and Co.

Mason, G., and Co. (Linn.)

Tyres & Co.

SEEDS—Potter & Clarke**SELTGERS**

Bratby and Hinchliffe (Ld.)

British Syphon Co.

Evans, Sons & Co.

Fordham, W. B., & Sons

(Linn.)

Gorant, E., & Co.

Lynch and Co.

Loyd, Mrs. A. S. (Luncheon)

Thesier, E.

SEAVING

Hovenden & Sons (Euxine)

Lloyd, Mrs. A. S. (Luncheon)

SEMP DIP

Fletcher Bros. & Co.

Hall, R., & Co.

Jays Sanitary Compounds Co.

Staples Bros. & Co.

SHOP FITTERS

Bowling and Gowler

Bygrave, J. and W.

Evans, Sons and Co.

Netall, S.

Potha, H., and Co.

Treble, G., and Co.

SOAP

Ayrton and Saunders

Barclay and Sons (Linn.)

Bayley and Co.

Blondeau and Co. (Vinolia)

Bronley, H., and Co.

Burroughs, Wellcome & Co.

Calvert, F. G., and Co.

Cook, E., and Co.

Fordham, W. B., & Sons (Ld.)

Jays Sanitary Compounds Co.

Mathews, F.

Pearl Soap

Price, Napoleon, & Co.

Stern, G., and G.

Wright, Layman & Umney

SPECTACLES

Botwright and Gray

Darton, F., and Co.

Parker, Son and Raymond

SPIRIT

Boord and Son

Burroughs, J. P., & Methyl.

Harvey, J., and W., and Co.

Jones and Co. (Methyl)

Lorenz, H.

Mania, A., and Co.

Phillips and Co.

Smith, Stephen and Co.

Warren, A., & J.

SPONGES

Cresswell Bros. & Schmitz

Evans, Sons and Co.

Peterson, M., and Co.

STAMPS (Rubber)

Barkley, J.

Hickinson, J.

Pollard, A. W.

STARCH

Chancellor & Co. (Mash's)

Joseph

Critchley (Gloss)

STOPPERS

Ansteth and Co. (Sprinklers)

Burnett and Foster

Mellin, C.

Superstition Stopper Co.

STOVES

Clark, S., and Co. (Linn.)

SUGAR

Fletcher, Fletcher and

Stevenson

Gibson, R., and Sons

Sankey Sugar Co.

SUGAR OF MILK

Burroughs Bros.

SULFONAL

Burroughs, Wellcome and Co.

Greiff, R. W., and Co.

May and Baker (Limited)

SURGICAL

Ayrton and Saunders

Baker, W. H., and Son

Barclay and Sons (Limited)

Cooking, J. T.

Harrison, T. H.

Hastell

Haywood, J. H.

Liverpool Patent Lint Co.

Lindsay & Sons

Maw, Son, & Thompson, S.

Powell & Barlow

Robinson and Sons

Schultz, H. C.

Schultz, F., and Co.

Sedox, Absorbents, and Anti-

Septics

Thompson, Walters, Hole and

Co. (Limited)

Whitaker and Donisthorpe

Wood, Vincent

SYPHONS

Barnett and Foster

Bratby and Hinchliffe (Ld.)

British Syphon Co.

Fordham, W. B., & Sons (Linn.)

Gorant, E., & Co.

Irls and Co.

Kilner Bros.

Mellin, C.

Superstition, J., & Co.

Thesier, E.

SYRUPS

Fletcher, Fletcher (Liquors)

Irls and Co.

TABULETS

Blyton, Ascher & Co. (Sulphur)

Cornish, J. R. (Advert. a.s.)

TEA

Cave, Johnson and Co.

Ch. Torner, Tea Co.

Walker and Dalrymple

TEETHING PADS

Marriott, E., & Co.

TEETHING MACHINES

Belley, W. H., and Son

Barclay and Sons (Linn.)

Darton, F., and Co.

Evans, Sons and Co.

Hicks, J. J.

Perken Son and Rayment

TOBACCO, CIGARS

CIGARETTES

Singleton and Cole (Linn.)

Taylor and Co.

TOILET

Allen & Hanbury (Christmas)

Belm of Bethesda

Burroughs, Wellcome & Co.

(Aniline)

Dee Oil Co. (Linn.)

Quelch, H. C.

Rowland, A., and Sons

Truett, H. F. (Limited)

Woods, M. (Aroma)

TOOTH PASTE

Beecham, T.

Horn & Son

Barclay and Sons (Limited)

Salvin, The Co.

Sutton, O., and Co. (Block)

Wilson, A. (Bunter's)

Woods, M. (Aroma)

TRADE MARKS

Horn & Son

Barclay and Sons (Limited)

Salvin, The Co.

Sutton, O., and Co. (Block)

Wilson, A. (Bunter's)

Woods, M. (Aroma)

TRUSSES

Barclay and Sons (Limited)

Salvin, The Co.

Sutton, O., and Co. (Block)

Wilson, A. (Bunter's)

Woods, M. (Aroma)

VENTILATORS

Howard and Sons

VACCINATION

Himee, Dr.

Vaccine Association (Lymph)

VALUERS AND

TENSURE AGENTS

Berde and Co.

Brett, F. J.

Crocker, G. H., & Co.

Orridge and Co.

VASELINE

Cheesbrough Manufacturing Co.

VETERINARY

Bird & Storey | Day and Sons

Day, Son and Hewitt

Ellman, Sons and Co.

James, W. H. (Bladders)

Jeyes' Sanitary Compound

Lloyd, T., Howard & Co.

Roakeley, F. E.

Spratts (Dogs)

Walker, Troke and Co.

Webb, Fardon & Co.

Wyllys & Co.

VINOLIA (Superf't'd)

Blondeau and Co.

WEBB KILLER

Aroma Chemical Co.

Round Chemical Co. (Linn.)

Butcher, W., & Son

Reade Bros. & Co.

WHOLESALE AND

EXPERT DIGESTS

Allen and Hanbury

Barron, Harveys and Co.

Battley and Watte

Burgoyne, Burbridge and Co.

Bush, W., and Co.

Bush, W. J., and Co.

Clay, Dod and Co.

Coward, G. F., & Co.

Delancey, Ch., & Co.

Evans, Sons and Co.

Evans, Lecher and Webb

Ferris and Co.

Fox, W., and Sons

Goodall, Backhouse and Co.

Harker, Fagg and Morgan

Harrington, W. and Son (Ld.)

Hearon, Squire and Francis

Hewlett and Son

Hill, A. S., and Son

Hodgkinson, Freshcher and Co.

Leithons and Saltmer

Lloyd, T., Howard and Co.

Macfie, J. F., and Co.

Oldfield, Pattison and Co.

Potter and Clarke

Richardson, J., and Co.

Smith & Sons | Symes & Co.

Thompson and Capper

Thompson, Walters, Hole and

Co. (Limited)

Walker, Troke and Co.

Willows, Francis and Eglist

Woolley, Jas., Sons and Co.



ROBINSON'S LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt, and sound Port Wine.

REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. ROBINSON, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University),
December 15, 1888.

Introduced 1855.]

ROBINSON'S CONCENTRATED WATERS.

[Introduced 1855.

One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopoeia, and free from all Chemical Impurity. They will keep good any length of time in any climate.



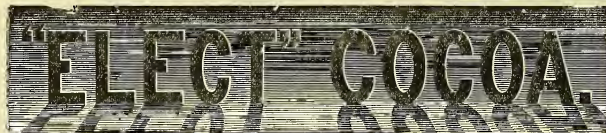
Aqua Ammonia, Concent., 4/ lb.	Aqua Citramm. Ver. Concent., 6/ lb.	Aqua Fossilum, Concent., 4/ lb.	Aqua Fumens, Concent., 6/ lb.	Rose Virgin., 10/8
Anis., 4/	Cassia, 4/	Menth. Pip., 4/	Rose, 4/	
Campbore., 4/	Flor. Aurant., 8/6	Arg., 4/		
Caroli., 4/	Flor. Sambur., 8/6	Virid., 4/		

The above are put up in Bottles of 1lb. or 1lb. and upwards, each of which has the Inventor's Protection Label over Cork.

From the LANCET, July 15, 1882:—"CONCENTRATED WATERS (Robinson's), Pendleton, Manchester.—Among the samples sent to us we find Aqua Ammonia, Aqua Citramm. Ver., Rose, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopoeia. They are excellent in quality, and will be very useful, especially in country practices. (1)

Wholesale Agents: RHABON & CO., London, and most Provincial Wholesale Druggists. PREPARED BY THE INVENTOR B. ROBINSON, MANUFACTURING CHEMIST, DISTILLER, AND BREWER OF BRITISH WINES, MANCHESTER.

ROWNTREE'S



The "MEDICAL PRESS AND CIRCULAR":—

"Certainly this preparation is of delicate flavour . . . It is perfectly soluble . . . the small quantity required for the immediate production of a cup of excellent cocoa will ensure for this 'Elect Extract' a favourable reception at the hands of persons of weak digestion, and all who prefer this wholesome beverage to tea and coffee."

The "BRITISH MEDICAL JOURNAL" says:—

"Rowntree's Cocoa Extract is one of the best. Its flavour and aroma are good. Cocoa thus prepared is one of the most digestible articles of food."

YORK, ENGLAND.

"MYRTLE GROVE" TOBACCO

In 1-oz., 2-oz., and 4-oz. Packets, and $\frac{1}{2}$, $\frac{1}{4}$, 1 lb, Tins only.



TADDY & CO., 45 Minories, LONDON

ESTABLISHED 150 YEARS.

SNUFF, TOBACCO, AND SEGAR MANUFACTURERS.



Write for List of Specialities.

TOBACCO AND CIGARS—MIXED PARCELS.

Every Requisite for the Smoker in One Order.

The following Manufacturers' Packet Tobaccos supplied at their List Prices CARRIAGE PAID:—Wills, Ope, Higgett, Gollhofer, Taddy, Ogden, Phillips, Player, Murray, Archer, Clarke, Brankston, Morris, Mitchell, Smith, Lambert & Butler, Pace, Goodwin, Duke, Kinney, Kimball, Richmond, Cavendish Company, Carroll, Lorillard, & Co., Havana, Mexico, Manilla, Indian, and Swiss Cigars and Cheroots at Importers' Prices.

The Cigarettes of the following Firms at List Prices:—Goodwin, Allen & Ginter, Kinney, Duke, Kimball, Au Bon Fumeur, Wills, Player, Lambert & Butler, Ope, and the leading Egyptian and Turkish Houses.

BRITISH CIGARS from 4s. to 20s. per 100. All carefully selected and well matured. The largest and most varied stock in the United Kingdom to select from.

Irish Roll, Pigtail, Nailrod, Target, Oake, Plug, and all other hard Tobaccos also Flakes, Shags, Virginias, Cut Cavendish, and every description of plain and fancy Cut Tobacco of standard quality at lowest prices.

Tobaccoists' Fancy Goods and Smokers' Sundries of every description at current rates.

Carriage paid on parcels from £2 upwards to any station in the United Kingdom. SEND FOR DETAILED PRICE LISTS.

SINGLETON & COLE, Ld. (Tobaccoists' Factors, Tobacco, Snuff, and Cigar Manufacturers & Importers, Cannon Street and Fore Street, BIRMINGHAM.

CHEMISTS' TEA AGENCY.

WALKER & DALRYMPLE'S TEAS.
REDUCED IN PRICE 2d. per lb.

WALKER & DALRYMPLE'S

BROKEN-LEAF TEA, 1s. 6d. per lb.

A MONEY SAVING TEA. ABSOLUTELY PURE.

The small leaf from some of the finest India and China Teas. Finedness Tea in the cup, stronger, richer, and cheaper than most whole-leaf Teas. Agents appointed, where unrepresented, throughout the United Kingdom.

WALKER & DALRYMPLE'S

INTERMEDIATE TEA, 1s. 10d. per lb.

BEST at the PRICE EVER SOLD. Great strength, and a most useful Tea where there is a large consumption. Recommended to all who wish to SAVE in their Tea. Agents appointed where unrepresented throughout the United Kingdom.

WALKER & DALRYMPLE'S TEAS.—

AGENTS APPOINTED, where unrepresented, throughout the United Kingdom. Prospectus and Samples Free on Application.

Warehouses, 154, 155, 159, and 160 WHITECHAPEL ROAD, and 2, 4, 6, 8, 10, 11, and 12 BRADY STREET, LONDON.

P.O.C. payable at head office. Bankers, National Provincial Bank of England

PANTIN GLASS WORKS, PARIS.

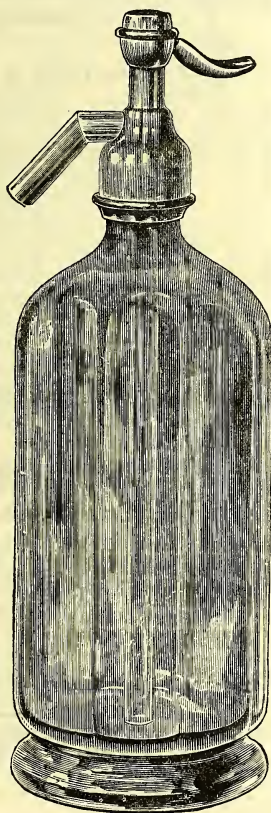
JAMES VIDIE ET FILS,

PATENTEES OF THE

OCTAGONAL SYPHON

The "Octagonal" is externally similar to the ordinary Syphon, the interior being blown of an octagonal shape by a new patent process.

Gives a most brilliant and sparkling appearance to the contents, and can resist double the pressure of ordinary Vases. Greatly recommend our new tint, "AZURE BLUE," which is the best tint for Syphon Vases.



"Ordinary" SYPHONS supplied to
the Trade
at the very lowest quotation.

C. MELIN

37 CRUTCHED FRIARS, E.C.

HOMŒOPATHIC
First
Established

Homœopathic Chemists.

JAMES EPPS & CO

48 Threadneedle Street,

London,

Eng.

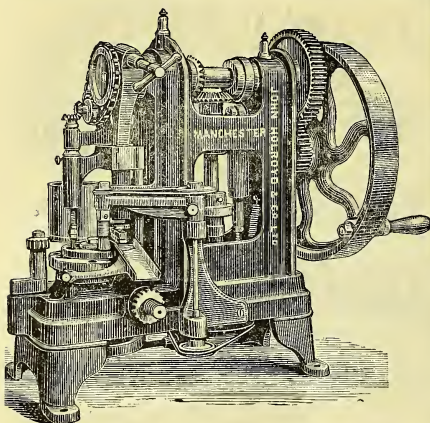
MEDICINES**SEASONABLE NOTICE!**

Chemists wishing to push their own name will find this package very suitable. The name and address sent must be printed, to avoid mistakes; will be ready for delivery within a week of receipt of order.

In Gross Parcels only through the Wholesale or direct, with your Name and Address, and Carriage Paid, on receipt of Postal Order, **25/-**

Or can be had through the Wholesale in 3 dozen boxes, without name and address, at **25/-** per gross.

JAS. PASCALL,
CONFECTIONER,
Blackfriars Rd., LONDON.



Sole Licensees for Manufacture and Sale of McFerran's Improved Automatic Machinery for Making

COMPRESSED TABLETS

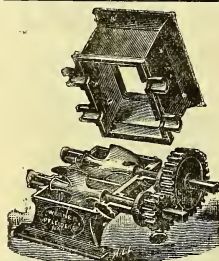
Of various shapes and sizes, from $\frac{1}{4}$ gr. upwards. Nos. 4 and 5 Machines have been specially designed for

RETAIL DRUGGISTS.

Write for particulars and prices. [2]

Special Machines Manufactured to Contract for Inventors and Merchants.

JOHN HOLROYD & CO., Lim., *Tomlinson St. Works,* Hulme, MANCHESTER.



Size 3, Type I, for 1-lb. Mass.



BUY THE BEST OIL PUMP AND SAVE OIL, TIME, MONEY.

THOUSANDS IN USE.

Write for full particulars and prices of The "Farrington" Patent Oil Pumps to

PONTIFEX & WOOD, LIM.
Shoe Lane, LONDON, E.C.

TURNED WHITE WOOD BOXES for CHEMISTS.

A. E. IDENDEN, SPENCER'S WOOD, READING.
Submits the following list of prices to the trade:

No.	Outside diam.	Depth	Per gross
1	1 1/2 in.	1 in.	£0 2 10
2	1 3/4 "	1 "	0 2 10
3 for 12 pills	1 7/8 "	1 "	0 2 10
4 " 18 "	1 7/8 "	1 1/2 "	0 3 2
5 " 24 "	1 7/8 "	1 3/4 "	0 3 2
6 " 30 "	1 7/8 "	1 3/4 "	0 3 8
7 " 35 "	1 7/8 "	1 3/4 "	0 3 8
8 " 40 "	2 "	1 3/4 "	0 4 1
9 " 48 "	2 1/4 "	1 3/4 "	0 4 1
10 " 72 "	2 1/2 "	1 3/4 "	0 5 7
11 " 72 "	2 3/4 "	1 3/4 "	0 5 7
12 " 72 "	2 3/4 "	1 3/4 "	0 6 4
13 " 72 "	2 3/4 "	1 3/4 "	0 8 0
14 " 72 "	2 3/4 "	1 3/4 "	0 9 2
15 " 72 "	2 3/4 "	1 3/4 "	0 10 0
16 " 72 "	2 3/4 "	1 3/4 "	0 10 10

Nos. 14 to 16 with beaded edges kept in stock, 2/6 per gross extra; other numbers to order. A single gross supplied at the above prices. Quotations given for large orders. Well-seasoned wood and good workmanship guaranteed.

THE "UNIVERSAL" KNEADING AND MIXING MACHINE

Pill Cutting, Pill Rounding, Pipers, and all other Machines for

PILL MASS MAKING,

Also for Horse Balls, Tooth Pastes, Ointments, Soaps, Powders, and for general Mixing, Incorporating, Sifting, and Straining.

REPLACES WITH ADVANTAGE ALL OTHER APPLIANCES FOR THESE PURPOSES.

Made in various sizes, to do from $\frac{1}{4}$ lb. up to 1 ton at a time.

WERNER & PFLEIDERER, 117 QUEEN VICTORIA ST., E.C.

Contractors to the War Offices of all the Great Powers and other Governments.

BEESWAX.

PURE REFINED BEESWAX.

"W. H. B."

In 2 lb. cakes in cases of about 130 lbs.

" 1 " " " 130 "

" 2 " " " 130 "

" 3 " " " 130 "

" 4 " " " 130 "

" 5 " " " 130 "

" 6 " " " 130 "

" 7 " " " 130 "

" 8 " " " 130 "

" 9 " " " 130 "

" 10 " " " 130 "

" 11 " " " 130 "

" 12 " " " 130 "

" 13 " " " 130 "

" 14 " " " 130 "

" 15 " " " 130 "

" 16 " " " 130 "

" 17 " " " 130 "

" 18 " " " 130 "

" 19 " " " 130 "

" 20 " " " 130 "

" 21 " " " 130 "

" 22 " " " 130 "

" 23 " " " 130 "

" 24 " " " 130 "

" 25 " " " 130 "

" 26 " " " 130 "

" 27 " " " 130 "

" 28 " " " 130 "

" 29 " " " 130 "

" 30 " " " 130 "

" 31 " " " 130 "

" 32 " " " 130 "

" 33 " " " 130 "

" 34 " " " 130 "

" 35 " " " 130 "

" 36 " " " 130 "

" 37 " " " 130 "

" 38 " " " 130 "

" 39 " " " 130 "

" 40 " " " 130 "

" 41 " " " 130 "

" 42 " " " 130 "

" 43 " " " 130 "

" 44 " " " 130 "

" 45 " " " 130 "

" 46 " " " 130 "

" 47 " " " 130 "

" 48 " " " 130 "

" 49 " " " 130 "

" 50 " " " 130 "

" 51 " " " 130 "

" 52 " " " 130 "

" 53 " " " 130 "

" 54 " " " 130 "

" 55 " " " 130 "

" 56 " " " 130 "

" 57 " " " 130 "

" 58 " " " 130 "

" 59 " " " 130 "

" 60 " " " 130 "

" 61 " " " 130 "

" 62 " " " 130 "

" 63 " " " 130 "

" 64 " " " 130 "

" 65 " " " 130 "

" 66 " " " 130 "

" 67 " " " 130 "

" 68 " " " 130 "

" 69 " " " 130 "

" 70 " " " 130 "

" 71 " " " 130 "

" 72 " " " 130 "

" 73 " " " 130 "

" 74 " " " 130 "

" 75 " " " 130 "

" 76 " " " 130 "

" 77 " " " 130 "

" 78 " " " 130 "

" 79 " " " 130 "

" 80 " " " 130 "

" 81 " " " 130 "

" 82 " " " 130 "

" 83 " " " 130 "

" 84 " " " 130 "

" 85 " " " 130 "

" 86 " " " 130 "

" 87 " " " 130 "

" 88 " " " 130 "

" 89 " " " 130 "

" 90 " " " 130 "

" 91 " " " 130 "

" 92 " " " 130 "

" 93 " " " 130 "

" 94 " " " 130 "

" 95 " " " 130 "

" 96 " " " 130 "

" 97 " " " 130 "

" 98 " " " 130 "

" 99 " " " 130 "

" 100 " " " 130 "

" 101 " " " 130 "

" 102 " " " 130 "

" 103 " " " 130 "

" 104 " " " 130 "

" 105 " " " 130 "

" 106 " " " 130 "

" 107 " " " 130 "

" 108 " " " 130 "

" 109 " " " 130 "

" 110 " " " 130 "

" 111 " " " 130 "

" 112 " " " 130 "

" 113 " " " 130 "

" 114 " " " 130 "

" 115 " " " 130 "

" 116 " " " 130 "

" 117 " " " 130 "

" 118 " " " 130 "

" 119 " " " 130 "

" 120 " " " 130 "

" 121 " " " 130 "

" 122 " " " 130 "

" 123 " " " 130 "

" 124 " " " 130 "

" 125 " " " 130 "

" 126 " " " 130 "

" 127 " " " 130 "

" 128 " " " 130 "

" 129 " " " 130 "

" 130 " " " 130 "

" 131 " " " 130 "

" 132 " " " 130 "

" 133 " " " 130 "

" 134 " " " 130 "

" 135 " " " 130 "

" 136 " " " 130 "

" 137 " " " 130 "

" 138 " " " 130 "

" 139 " " " 130 "

" 140 " " " 130 "

" 141 " " " 130 "

" 142 " " " 130 "

" 143 " " " 130 "

" 144 " " " 130 "

" 145 " " " 130 "

" 146 " " " 130 "

" 147 " " " 130 "

" 148 " " " 130 "

" 149 " " " 130 "

" 150 " " " 130 "

" 151 " " " 130 "

" 152 " " " 130 "

" 153 " " " 130 "

" 154 " " " 130 "

" 155 " " " 130 "

" 156 " " " 130 "

" 157 " " " 130 "

" 158 " " " 130 "

" 159 " " " 130 "

" 160 " " " 130 "

" 161 " " " 130 "

" 162 " " " 130 "

" 163 " " " 130 "

" 164 " " " 130 "

" 165 " " " 130 "

" 166 " " " 130 "

" 167 " " " 130 "

" 168 " " " 130 "

" 169 " " " 130 "

" 170 " " " 130 "

" 171 " " " 130 "

" 172 " " " 130 "

" 173 " " " 130 "

" 174 " " " 130 "

" 175 " " " 130 "

" 176 " " " 130 "

" 177 " " " 130 "

" 178 " " " 130 "

" 179 " " " 130 "

" 180 " " " 130 "

" 181 " " " 130 "

" 182 " " " 130 "

" 183 " " " 130 "

" 184 " " " 130 "

" 185 " " " 130 "

" 186 " " " 130 "

" 187 " " " 130 "

" 188 " " " 130 "

" 189 " " " 130 "

" 190 " " " 130 "

" 191 " " " 130 "

" 192 " " " 130 "

" 193 " " " 130 "

" 194 " " " 130 "

" 195 " " " 130 "

" 196 " " " 130 "

" 197 " " " 130 "

" 198 " " " 130 "

" 199 " " " 130 "

" 200 " " " 130 "

" 201 " " " 130 "

" 202 " " " 130 "



POTTERS HERB BEER EXTRACT

TERMS :

In 6d. Bottles (attractive label in 6 colours),
3/6 per doz ; 39/ per gross.

HANDBILLS, SHOW CARDS, &c., with all orders.
In Bulk, 9d. per lb. ; 70/ per cwt.

SPECIAL NOTICE.

We can supply 6d. Bottles with special wording
on labels, as "Smith's Herb Beer Extract," &c.
Labels in colours. Price 39/ per gross nett.

POTTER & CLARKE,

WHOLESALE & EXPORT BOTANIC DRUGGISTS,

5, 6 & 7 RAVEN ROW, ARTILLERY LANE, E.

HERBS IN PACKETS.



SPECIAL FEATURES :

See that
every
Packet you get
bears the Trade
Mark—
WINGED LION.



The
WINGED LION
Sweet Herbs
gained the only
Prize Medal for
Purity at the



Health Exhibition,
1884.

Instructions on each Packet.

No Waste, as in the case of Loose Herbs.

Medicinal Properties unimpaired.

A number of Valuable Recipes given.

ONE QUALITY ONLY—THE BEST.

POTTER & CLARKE (Wholesale Botanic Druggists,)
5, 6 & 7 Raven Row, Artillery Lane, LONDON, E.

SULPHUR TABLETS.

We have now a department engaged exclusively in the production of Sulphur Preparations; this, combined with a rapid system of drying, enables us to execute the heaviest orders at



short notice. We prepare several kinds as under, any of which may be obtained packed in Eight-pound Counter Boxes, with glass lid, suitably labelled.

Oblong Tablets from Sulph. Sub. c. Crem. Tart.

Oval Lozenges (Garrod's Formulæ).

" " " Precip. c. " Square " " "

Chemists may have any size or shape made, and STAMPED TO ORDER, packed in the above boxes, within seven days of receipt of order. Each box contains a quantity of small neat labels suitable for fixing to retail packages. Our goods cannot be excelled by any house in the trade, and the prices are exceedingly reasonable.

MAG. CIT. GRAN. & EFF. SALINE,

FROM GUARANTEED PURE ENGLISH CHEMICALS.

We are prepared to make contracts for Home or Export trade, and to give closest quotation according to grade, packed as required, F.O.B. any of the United Kingdom ports. Mag. Cit. Gran. grades, A, B, C, and D. Saline grades, I. and II.

CHLORATE OF POTASH PELLETS,

FROM PURE CHLORATE.

In small quantities, or in original 1 cwt. Barrels.
WE SUPPLY THE LEGITIMATE DRUG TRADE ONLY. SAMPLES FREE.

BLYTON, ASTLEY & CO.

Manufacturing Pharmaceutical Chemists,
EAGLE LABORATORIES, MANCHESTER.

GLYCERINUM PEPTICUM.

(FAIRCHILD.)

This Glycerine extract of the peptic ferment possesses every requisite of a concentrated solution of pepsin. It is highly active, uniform and stable, devoid of objectionable odour or taste, is freely miscible without precipitation or cloudiness with all proper menstrua or media, is notably free from all disagreeable qualities and characteristics of peptone solutions. It contains no alcohol or antiseptics other than glycerine of the purest quality.

Glycerine possesses peculiar value as a vehicle for pepsin, it being the only substance known which is at once both a powerful solvent and a preservative of the ferments of the gastric juice. For this reason, glycerine extracts of pepsin have been recommended and employed in experimental work by physiological chemists.

The properties and value of pepsin are so well known that the advantages of a pure glycerine extract of this ferment will be well understood by both pharmacists and physicians.

Glycerinum Pepticum (Fairchild) possesses every desiderata, both from a pharmaceutical and medicinal standpoint.

Twelve minims will be found equivalent in activity to one grain of the best pure pepsin in a dry form that is to be found in the market. It will be found, upon comparative test, of much greater strength than any fluid preparation of pepsin known.

It mixes freely, without precipitation or cloudiness, with all clear liquids with which pepsin is or should be employed.

Pharmacists will appreciate the facility with which the usual fluid preparations of pepsin may, by means of the Glycerinum Pepticum, be quickly and economically prepared, as there is no loss by filtration. It is agreeable to take, and may be mixed with pure water, wine, or any of the usual vehicles.

Glycerinum Pepticum supplied to the Trade in 4-oz. bottles, at 22/0 per doz.
Retail, 2/6 each.

THE "VASELINE" SOAPS

For **TOILET, BATH, and NURSERY**, are being largely advertised, & command a ready sale on account of their excellence & cheapness.

"VASELINE" SOAP, unscented, each tablet in card case; boxes of 3 dozen tablets.

SUPERFINE ditto, delicately perfumed, card boxes of 3 tablets.

"VASELINE" TAR SOAP, 10 per cent. of tar, card boxes of 6 tablets.

CHESEBROUGH MANUFACTURING CO., 42 HOLBORN VIADUCT, LONDON, E.C.

Proprietors and Sole Makers of the "VASELINE" Preparations.

WAFER MEDICINE CACHETS (B., W. & CO.)

(E. GORLIN'S PATENT.)

An ingenious yet simple method of taking disagreeable medicines in the form of liquid, powder, or "Tabloids." To charge a Cachet, which is composed of pure rice starch, it is spread out in the folder, as shown in the accompanying illustration, and the contents placed in the cap. The lid of the Cachet is then wetted and brought over by means of the lid of the folder. When pressed on the top of the cap it is completely sealed, and prevents any egress of the contents into the mouth. Just prior to taking the Cachet, it should be dipped in water, and then placed on the tongue, and may be easily swallowed with a little water.



B., W. & Co. Wafer Medicine.

The British Medical Journal says they are "well adapted for the administration of unpalatable powders or liquids." *The London Medical Recorder* reports: "They will be welcome to medical men and to their patients, and also to pharmacists, whose labours they will lighten."

Supplied to the Trade in boxes of 100 at 14s. per dozen.

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.

ISO-BUTYL NITRIS.

Also **GLASS CAPSULES** of ISO-BUTYL NITRITE.

For use in Angina Pectoris, Asthma, and similar complaints, by Inhalation.

Liquor Cascaræ Suavis.

(REGISTERED.)

An agreeable Aromatic Fluid Extract of *Cascara Sagrada*, possessing the full laxative and aperient properties of the bark.

Sol. Æthyl Nitritis.

Containing 3 per cent. of Pure Nitrite of Ethyl, in Absolute Alcohol and Glycerine.

See paper by Professor LEECH on "The Comparative Effects of Spiritus Ætheris Nitrosi and Solution of Ethyl Nitrite," *Pharmaceutical Journal*, December 22, 1888.

Spiritus Ætheris Nitrosi.

Guaranteed to contain the proportion of Nitrous Ether directed by the British Pharmacopœia.

Æther Nitrosus and Sol. Ætheris Nitrosi.

Respectively 8 and 4 times the strength of the Spirit.

JAMES WOOLLEY, SONS & CO.

Manufacturing Pharmaceutical Chemists,

MANCHESTER.

Laboratories and Drug Mills, KNOWSLEY STREET, CHEETHAM.

QUOTATIONS AND PRICE LIST FORWARDED ON APPLICATION.



ESTABLISHED 1859 AS A MONTHLY. SINCE MARCH, 1880,
A WEEKLY JOURNAL.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICE, FINE'S BUILDINGS, MELBOURNE 3,
AUSTRALASIA.

Subscription 10s. per year, payable in advance, including a copy of *THE CHEMISTS' AND DRUGGISTS' DIARY* next to be published, post free to every country in the world. New subscriptions should date from the commencement of any month.

Supplied only to persons connected with the Trade.
Single copies 4d. each.

Cheques and Postal Orders should be payable to EDWARD HALSE, and crossed MARTIN'S BANK (LIMITED).

SUPPLIED regularly to every member of the following Societies, who have adopted *THE CHEMIST AND DRUGGIST* as their official organ.

The Pharmaceutical Society of Ireland.
South African Pharmaceutical Association.
The Pharmaceutical Association of New Zealand.
The Central Association of New Zealand.
Otago Pharmaceutical Association.
The Pharmaceutical Society of Queensland.
The Pharmaceutical Society of South Australia.
Tasmanian Pharmaceutical Society.

Literary Contents.

	PAGE		PAGE
Bankruptcy Reports	700	Editorial Comments (cont.)—	
Burlington House Echoes	693	Research on Sarsaparilla	697
Chemists' Assistants' Association	694	Mogadore Wax	698
Commentary	698	English News	683
Corner for Students	682	Foreign and Colonial News	687
Correspondence—		French Pharmaceutical News	687
The Patent-medicine Stamp;		Gazette	703
Veterinary Chemist De-		Irish News	683
fence Fund; <i>THE CHEMIST</i>		Labour Commission	693
<i>AND DRUGGIST</i> as a Court		Legal Reports	705
of Appeal, &c.	709	Marriages	701
Dispensing Notes	710	Personalities	695
Legal Queries	711	Pharmaceutical Society of Ire-	
Miscellaneous Inquiries	711	land—	
Deaths	701	Council Meeting	688
Deaths of Arrangement	700	Photographic Notes	699
Editorial Comments—		Scottish News	686
Poisonous Patent Medicines	693	Trade Notes	694
		Trade Report	705

AMERICAN ISSUE.

THE next issue of *THE CHEMIST AND DRUGGIST* will have a special circulation amongst the best drug firms in the United States and Canada. There is thus provided for the English and European trade an excellent opportunity of directly addressing buyers in the American market through the medium of an English journal. Those who wish to secure good positions for their advertisements should address the publisher by an early post, as the advertisement-sheets will be made ready for press next Wednesday.

Summary.

WE have to record the death of Professor von Hofmann, the famous Anglo-Teutonic aniline chemist of Berlin.

ONE of the proprietors of this journal has been elected an alderman of the City of London. We publish his portrait.

THE chlorodyne case is not to be carried to an appeal. We give the label which the proprietor now attaches to each bottle.

OUR Corner for Students tournament has reached its penultimate stage. The first six competitors are very close together.

Two judgments for penalties against unqualified sellers of poisons have been obtained by the Pharmaceutical Society at Glossop.

FURTHER striking evidence as to the conditions of the workmen in chemical-works has been laid before the Labour Commission, and is reported in this issue.

THE Board of Inland Revenue have been a second time defeated in their attempt to enforce the still-licence on gas-manufacturers. It is understood that this case is to go to the High Court for ultimate decision.

DOES the term "ex warehouse" imply immediate delivery or at least possession of goods sold by the vendor? Evidence corroborating this view satisfied the Judge of the Bristol County Court in an interesting drug case tried there.

WE report a lively discussion in the Irish Pharmaceutical Council on the recent actions taken against unqualified persons for dispensing. The minor question whether a report in this journal was accurate or not, is incidentally raised.

Next Week.

MONDAY, May 16.—*Society of Arts*, at 8 P.M. Professor Percy F. Frankland's third Cantor lecture on "Recent Bacteriological and Chemical Research in connection with the Fermentation Industries."

TUESDAY May 17.—*Royal Institution of Great Britain*, at 3 P.M. Mr. F. E. Ives, on "Photography in the Colours of Nature."

TUESDAY, May 17.—Pharmaceutical Society's annual dinner in the Freemason's Tavern, at 6.30 P.M.

WEDNESDAY, May 18.—*Society of Arts*, at 8 P.M. Captain W. de W. Abney on "Colour-blindness."

WEDNESDAY, May 18.—*Pharmaceutical Society*, 17 Bloomsbury Square, W.C. Annual meeting, at 11 for 12.

WEDNESDAY, May 18.—*Royal Microscopical Society*, at 8 P.M. Mr. R. T. Lewis on "The Organs of Oviposition in certain Cattle Ticks." Mr. E. M. Nelson on "The Penetrating Power of the Microscope" and "The Rings and Brushes of Crystals."

THURSDAY, May 19.—*Royal Institution of Great Britain*, at 3 P.M. Professor Dewar on "The Chemistry of Gases."

THURSDAY, May 19.—*Chemical Society*, at 8 P.M.

FRIDAY, May 20.—*Royal Institution of Great Britain*, at 9 P.M. J. Wilson Swau, Esq., M.A., F.C.S., on "Electro-Metallurgy."

TARTAR EMETIC, according to Harnack, is a doomed medicine. Apomorphine has all its diaphoretic and emetic properties without its disadvantages.

HERE'S A PRETTY HOW-DY-DO! The wife of a New Hampshire druggist became a Christian science healer, and, setting up in business for herself, drew so much patronage from the drug store that in retaliation the injured husband filed a bill for divorce on the grounds of extreme cruelty.—*Western Druggist*.



CONDUCTED BY RICHARD J. MOSS, F.C.S., F.I.O.

QUALITATIVE ANALYSIS.

A MIXTURE of three salts will again form the subject of the exercise in qualitative analysis. It is to be submitted to a thorough systematic examination; its constituents are to be detected, and all other substances proved absent.

Students' applications for portions of the mixture will be received up to Wednesday, May 18, and the samples will be forwarded immediately.

Students' reports will be received up to Saturday, May 28. Each report should contain a concise account of the work done, and should include a list of the constituents detected; in this list accidental impurities should be distinguished from the principal constituents of the mixture.

REPORTS.

The subject of the last exercise was a mixture of 3 parts of potash alum, 1 part of nickel sulphate, and 1 part of calcium phosphate. The calculated composition of this mixture is:—

Ni	4.20
Al	3.48
Ca	7.74
K	4.93
SO ₄	3.11
PO ₄	12.25
H ₂ O	36.28

100.00

The only impurities of any note were traces of iron, chlorine, and the carbonic radicle.

Packets of the powder were sent to eighty-eight students, and fifty reports were received. Nineteen students succeeded in detecting all the constituents, and the failures in the other cases were as follows:—Calcium, 21; nickel, 12; aluminium, 8; potassium, 8; the phosphoric radicle, 18; the sulphuric radicle, 0.

The difficulties which this analysis presented arose from the presence of a salt of one of the alkali earths, soluble in acids, but insoluble in water. To obtain a solution of the powder it was necessary to employ an acid, such as hydrochloric acid, and when in the ordinary course of the analysis ammonia was added to precipitate the iron group, the free acid present was neutralised, and the liquid was thus rendered incapable of holding the insoluble salt (calcium phosphate) in solution. In this way calcium was precipitated out of its proper place. Not only did calcium thus escape detection, but its presence where the student did not expect it to occur gave rise to mistakes, and in several cases the calcium phosphate was mistaken for a zinc compound. There are several other salts which would give rise to a similar difficulty—calcium oxalate, for example—and before proceeding with the analysis in the ordinary way, the student must make sure that the mixture contains no such compounds. An oxalate or other organic compound is easily disposed of by ignition, but the phosphoric radicle is not so

easily removed; the plan generally resorted to is to precipitate it in combination with iron, but for the details of the method we must refer our correspondents to their text-books. To those who knew the right method to employ with such a mixture this analysis was an easy one, but for beginners it was decidedly difficult, and those who find their names low down in the list must not be discouraged.

PRIZES.

The First Prize for the best analysis has been awarded to

W. TILTMAN (Zirconium), care of Messrs. Matthews & Son, Harrow Green, N.E.

The Second Prize has been awarded to

W. R. HEDGES, jun. (W. R. H.), Dale End, Birmingham.

Marks Awarded for Analyses:—

W. Tiltman (1st prize)	98	W. Roberts	75
W. R. Hedges, jun. (2nd prize) ..	97	Ulexine	72
Elisir (A. E. C.)	95	A. Leader	72
Experientia	95	Venditor	70
Leo	95	Bynol	70
H. Bowden	94	First Trial	68
Verax	94	Tyro	65
W. Maskew	93	J. Braham	60
A. B.	93	M. F. C. S.	58
W. Hood	93	Ornum	55
Martin Magor, jun.	93	Sapientia	55
Moyhitt	93	C. C. D. D.	53
Cogito	92	Victory	52
A. Blowpipe	92	Haslar	50
H. F.	92	Styrax	50
J. Ashworth	91	Pepsine	45
L. F. M.	91	Acidulous	40
Pyroxyl	90	Nena	35
H. McL. R.	90	Lapides	25
E. Rajah	85	H. G. H.	22
Danwer	85	Tempus	20
Rub Raw	83	Penedanum	18
Nalli Secundum	83	Vigornia	15
J. Ross	80	Epsilon	10
C. E. Ashby	78	Vin de Oca	5

HALF-YEARLY PRIZE.

The Proprietors of THE CHEMIST AND DRUGGIST offer a Special Prize, consisting of either Mendeleeff's "Principles of Chemistry" or Fresenius's "Chemical Analysis, Qualitative and Quantitative," to be awarded to the student who obtains the largest number of marks in the Corner for Students during the first six months of the year 1892.

We find that fifty-five who have competed on former occasions this year do not send in reports this month, or have not sent for samples. The result is considerable shifting of the names on the grand list. Thus 16 and 17 in the last list have not competed in this occasion. Probably the Easter holidays may account for this, but it is noteworthy that the competitor who now occupies the chief place and takes the first prize this month has not previously succeeded in getting above the ninth place. His record so far has been:—

January	12th place, and 83 marks
February	11th " " 84 "
March	9th " " 87 "
April	11th " " 83 "
May	1st " " 98 "

The moral that we draw from this is that every competitor should keep at the work steadily.

The exercise given this past month appears to have been too much for many, the consequence being considerable alteration in the placing of the various names; but the competition is still very close, and all our young analysts should

use the utmost care in their next exercise. At present the list stands as follows:—

1. Zirconium	477	54. L. K.	154
2. Molybdt	476	55. Tyro	151
3. H. Bowden	475	56. M. F. C. S. ..	148
4. A. Bloupe	474	57. A. Lander	148
5. Verax	468	58. First Trial	142
6. E. Rajah	465	59. C. M. H.	135
7. B. A. (A. B.) ..	457	60. A. P. S. (S. P. Q. R.)	128
8. J. Rose	450	61. Ulexine	127
9. W. Hood	448	62. Peucedanum	109
10. W. Maskew	442	63. Styraz	107
11. A. M. (Elkix, A. E. C.)	441	64. Eucalyptus	100
12. Nail Secundum ..	434	65. Epsilon	98
13. C. E. Ashby	421	66. H. O. Thurland ..	96
14. Pepsine	422	67. Atom	93
15. H. F.	421	68. Martin Magor, jun.	92
16. Ruh Raw	420	69. John	92
17. L. F. M.	407	70. Aluminium Silicate	91
18. Danwer	395	71. Success	90
19. Experientia	375	72. Vertolac	89
20. Acacia (Bynol) ..	370	73. Mel	89
21. W. R. H.	365	74. Azalea	88
22. Leo	361	75. W. Jones	87
23. Cogito	360	76. Macdon	86
24. J. Bircham	335	77. Glucose	83
25. Ozone	334	78. Radix	83
26. Pyrrhus	323	79. L. J.	80
27. Vigovnia	324	80. Perseverance	80
28. H. G. H.	319	81. S. O. H.	78
29. Vin de Coca (Epp.)	309	82. J. Hamerton	78
30. Sapietia	296	83. Maculatum	78
31. Nema	294	84. Mercuric	78
32. Pyroxyl	281	85. Broadacre	77
33. Venditor	274	86. Flame	77
34. Tempus (Digitalis)	234	87. Labor	75
35. Orann	227	88. Chichona	74
36. Addulous	225	89. R. I. P.	72
37. Haelar	224	90. Elkix (A. R.)	71
38. C. C. D. D.	224	91. S. P. Q. R.	68
39. Agricola	207	92. Opium	68
40. Victory	201	93. S. G. B.	68
41. C. N. A.	197	94. J. Schöfeld	65
42. W. J. Brewer	192	95. F. O. C. L.	60
43. Celcius	192	96. Fred Gee	60
44. Zymine	186	97. A. A. B.	58
45. M. A. Z. (Elkix) ..	180	98. H. G. F.	55
46. C. S. R.	177	99. Calomet	55
47. H. M. L. R.	170	100. Xam	50
48. Verdant Green ..	159	101. Sarsse	50
49. W. Roberts	159	102. A. M. D. G.	45
50. J. Ashworth	153	103. S. H.	40
51. S. Davis	154	104. Lapidis	25
52. Spes	153	105. Meliron	5
53. Ironium	158		

TO CORRESPONDENTS.

Prizes.—The students to whom prizes are awarded are requested to write at once to the Publisher, naming the book they select, and stating how they wish it forwarded.

Any scientific book that is published at a price not greatly exceeding half a guinea may be taken as a first prize.

Any scientific book which is sold for about five shillings may be taken as second prize.

Note.—All communications should include the names and addresses of the writers.

A. BLOWTPE.—Your correction was noted; an error in reagents such as you detected ought to be all but impossible.

E. RAJAH.—You were mistaken as to the quantity of chloride in the mixture; a nitric-acid solution of the powder showed only a slight opalescence on the addition of silver nitrate.

DANWER.—The phosphate that was present had an important bearing on the method to be adopted in the analysis of the ammonia precipitate. The molybdo-acid test has great advantages when phosphoric acid is to be sought in an acid solution. Very few students detected the trace of carbonate.

RUH RAW.—You evidently failed to separate the phosphoric acid completely by means of ferric chloride, and it was thrown down in combination with the calcium in the precipitate which contained the nickel sulphide.

J. ROSE.—Considering the important error in regard to phosphoric acid, it is remarkable that your results were otherwise so correct. It was the

portion insoluble in water that ought to have been most carefully examined for phosphoric acid.

W. ROBERTS.—Aluminium was easily detected in the aqueous solution, but if you boiled the powder for some time with water, it is possible that some of the aluminium separated as phosphate.

ULEXINE.—Even the original powder gave a distinct potassium coloration to the Bunsen flame.

A. LANDER.—If an acid solution of the portion insoluble in water failed to give a precipitate with ammonia, it was simply because the ammonia was not added in excess. It is clear from the nature of the reaction the ammonia is intended to produce, that it must be employed in sufficient quantity to convert the acid solution into an alkaline one.

VENDITOR.—The nickel sulphide had not been very finely powdered, and some of the bright-green particles were easily separated, and, on heating in a borax bead, the violet colour characteristic of nickel was obtained. Of course, the nickel should have been detected in its proper place in the wet analysis as well.

FIRST TRIAL.—You omitted to send your name and address.

TYRO.—You must have observed the fragments of green crystals in the powder; the composition you assigned to it would not account for a green salt.

SAFENTIA.—We could not obtain a trace of the yellow precipitate that you produced with sulphuretted hydrogen.

C. C. D. D.—See remarks to "First Trial"; the writer's name and address should accompany every communication.

VICTORY.—Your test for nitric acid was so imperfectly described that it was difficult to make out what you observed. Nitric acid should not be employed as a solvent when hydrochloric acid can be used. The separation of several of the metals by sulphuretted hydrogen is interfered with by nitric acid.

STYRAZ.—The blue colouration with cobalt nitrate is not peculiar to alumina; several other substances, notably phosphates, give a similar colouration. The phosphates were the cause of your difficulty in the examination of the precipitate which you supposed to consist of aluminium hydrate. You have not done so badly in the search for the acid radicals; they cannot, unfortunately, be resolved into such convenient groups as the metals. You will find everything you want in Atkins's "Chemistry," and it will probably suit you better than a purely analytical handbook. If you want to make a special study of analysis, Fresenius's "Qualitative Analysis" is about the best book you can select.

NEMA.—Your method was not suitable for the analysis of a mixture containing a phosphate of one of the alkali earths.

LAPIDES.—Your note could scarcely be called a report; it is necessary to describe what you did with the powder, so as to show clearly what your reasons are for the conclusion arrived at.

H. G. H.—You are gifted with a vivid imagination if you were able to suppose that the powder smelt of burnt sugar when ignited. You ought to practice the analysis of some mixtures of calcium phosphate with other salts.

PEUCEDANUM.—The presence of calcium phosphate completely upset your calculations; before a proper analysis could be made it was necessary to remove the phosphoric radical.

EPSILON.—You will have to work hard at mixtures of your own preparation before you can expect good results with mixtures of unknown composition.

English News.

The Chlorodyne Case.

Mr. Davenport has decided not to appeal against the decision of the Bow Street magistrate. He now attaches the following label to every bottle of chlorodyne sent out:—

A preparation containing, amongst other ingredients, chloroform and morphia. The law, therefore, requires it to be labelled Poison.

It should also be understood that the law requires besides that every retail vendor of the article should attach his own name and address.

Unregistered Vendors of Poisonous Proprietary Medicines.

The *British Medical Journal* concludes an article on the chlorodyne case thus:—"We cannot agree with Mr. Poland's contention that the consequent restriction of the sale of such articles to legally qualified chemists and druggists would be 'ridiculous.' On the contrary, we consider the achievement of that result to come within the especial object of the Pharmacy Act, and that it will be the duty of the Council of the Pharmaceutical Society to

enforce that restriction vigorously. The opportunity for taking action in that way is now being provided by the removal of the veil of secrecy under which irregular sales of poison have hitherto been carried on, and it is to be expected that chemists and druggists throughout the country will loyally and actively support their representative executive in securing due observance of the law. If they fail to do so in a matter that will so obviously operate to their own advantage, they will forfeit all claim to be regarded by the public as entitled to higher consideration and confidence than ordinary traders, and is unworthy of the protection which the Pharmacy Act provides for them."

A. Champion Pill-taker.

At the Woolwich Police Court on Saturday, William Bright, 43, a dock labourer, was charged with wilfully breaking a square of glass, value 1s., at the Manorway railway station, Royal Albert Docks, and with the unlawful possession of three bottles of pills (Warner's, Philadelphia), value 4s. On inquiry it was ascertained that a number of bottles of pills were missing from a vessel on which the prisoner had been employed. The prisoner: I bought the pills in the street, off a chemist or quack. I can't call him a doctor. (Laughter.) Mr. Marsham: What were you going to do with so many? Were you going to sell them again? Prisoner: Sell them? No, take them. There is no man in the world takes more pills than I do. (Laughter.) I could not get sober without a dose of pills, and I'm no sooner sober than I'm sprung again, and then there's more pills. (Laughter.) Oh, I could never get on without my pills. Mr. Marsham: You do not seem very sober now. You have had no pills this time. (Laughter.) Mr. Marsham remanded the prisoner for a week, telling him that he would be quite sober by that time.

Store Prices.

The only alterations in quotations in the drug department announced by the Civil Service Stores for this month are the following:—Chemical food (Parrish's, Squire's), from 2s. 7d. to 2s. 6d.; graduated drop-glasses (60 drops), from 4d. to 3½d.; Tricopherous (Barry's) hair-wash, from 2s. 3d. to 2s. 2d.; Eau de Fé's hair-wash, from 3s. 5d. to 3s. 4d.; citrate of magnesia (Bishop's), per 1-lb. bottle, from 2s. 5d. to 2s. 4d.

Carbolic Proof.

Emma Woods, a widow, was charged last week at the Trowbridge Police Court with having attempted to commit suicide in February last. She obtained a fluid ounce of carbolic acid at Mr. Dyer's chemist shop, and drank it at home. She recovered after a month's medical treatment, Dr. Wise now stating that this was the only case he knew of where such a dose of carbolic acid had not proved fatal. The Bench committed the woman for trial, but allowed bail.

A Bullock in a Chemist's Shop.

At the Brentwood County Court on Friday of last week a local chemist sued Frederick Poole, butcher, of High Street, in respect of damage done to the stock and fixtures of his shop in consequence a bullock, the property of the defendant getting into it whilst being driven in a negligent manner under the care of a drover named Hicks. It was urged for the defence that the drover (being licensed) was the person responsible for the damage, and not the defendant, as the drover was not a servant, but a contractor, who was at liberty to drive at the same time animals belonging to different butchers. His Honour, however, held that the drover was a servant, and gave judgment for the plaintiff for 10l. 10s. and costs, refusing leave to appeal in view of the small amount of the judgment.

The Spot of Laudanum.

An inquest was held at Leicester on May 5 respecting the death of the infant child of John and Clara Boss. The baby was a month old. It seemed in pain and was much purged. Mrs. Wardle, a neighbour, recommended, a "spot or two" of laudanum, but the mother said she did not like sleeping-stuffs. Ultimately, however, Mrs. Wardle had her way. She put a "spot" in an egg cup, so small, she said, she could hardly see any there, and gave it to the child, who went to sleep almost directly. Later on it seemed very ill, and Mrs. Wardle then recommended and administered a halfpenny-

worth of castor oil—about a teaspoonful. Mrs. Bailey, another neighbour, came next, and at her recommendation some warm salt-and-water was given as an emetic. Last of all a doctor was sent for. He gave an emetic and treated the child otherwise, but it died eleven hours after taking the laudanum. The doctor made a *post-mortem* examination, and said he believed the child died from laudanum-poisoning. Mr. Harvey, the coroner, in summing up, said that it was the legal duty of every person, except in case of necessity, who undertook to administer surgical or medical treatment, to employ in doing it a common amount of knowledge, skill, attention, and caution. The question for the jury was whether Mrs. Wardle, who did certainly profess to administer medical treatment, had used an ordinary amount of skill. Whatever her intentions and qualifications may have been the child died from her treatment. If that was a mere mishap they would return a verdict of death from misadventure, but if they found that she did not exercise a common amount of skill, then she was guilty of manslaughter. Life must be protected against persons who furnished medical treatment, even with the best intention, if they were not persons having the necessary skill, and if they acted with rashness.

After some consideration the jury came to the conclusion that death was the result of misadventure, but asked the coroner to censure Mrs. Wardle and the mother, which he did with much discrimination.

Claim against a Chemist.

In the Lambeth County Court on Thursday last, before his Honour Judge Bristowe, Q.C., Messrs. Waltham, brewers, Stockwell, sought to recover 8l. 10s. 4d. for goods supplied to Mr. Howard Smith, a chemist carrying on business at High Street, West Norwood. The plaintiff's representative gave evidence as to the order and delivery of the goods. Mr. Howard Smith admitted his liability to the extent of 2½l. but swore most emphatically that he told the plaintiffs that he would not be liable beyond that sum, as he did not feel disposed to pay for all the goods which his servants chose to order. After hearing this, the learned Judge said there really was no defence to the action, as it was very clear that the whole of the goods had been ordered and delivered. Judgment must, therefore, be for the plaintiffs for the amount claimed, with costs.

A Specialist's Difficulties.

In the Westminster County Court, on Thursday, an application was made to his Honour Judge Bayley for the committal of Mrs. Hillock, for having failed to comply with an order of the Court for the payment of a judgment-debt of 5l. 15s. for goods supplied by Mrs. Cooper in the way of trade. A member of the plaintiff's firm said the defendant could pay this money. She was the inventor of a patent cure for deafness, and carried on her business in expensive premises in Berners Street. The defendant said that it was true she carried on business in Berners Street, but she had been almost totally ruined in consequence of the arbitrary treatment to which she had been subjected by some of her creditors, whom she had been compelled to prosecute in consequence. As a result of the prosecution she had received a sum of nearly 50l., but she had paid it all away to liquidate her debts, and she was now without any means of paying this money as her business was almost ruined. The Judge said he was not satisfied that the defendant had any means to pay, and therefore he should not make any order against her.

Committal of a Lecturer on Chemistry.

In the Westminster County Court, on Tuesday, the case of Henderson v. Williams came before his Honour Judge Bayley, by way of a judgment-summons applying for the committal of the defendant for non-compliance with a previous order of the Court. The learned Judge wanted to know what the defendant's means of payment were, and the plaintiff's representative stated that he was the manager of a school of chemistry and was in receipt of a very good salary. He could well afford to pay this money, and if a committal order was made there would be no further trouble in the matter. The Judge: The defendant does not take the trouble to attend the court, and therefore I must assume that he can afford to pay. There will be an order for his

committal for twelve days, but the warrant will be suspended for fourteen days.

Laudanum and the Antidote.

A young servant-girl—Emma Hyatt—was before Mr. Haden Corser at North London Police Court on Tuesday, charged with attempting to commit suicide by taking laudanum. She had been in the employ of Mrs. Unwin, of Tufnell Park, and had got into trouble through either laziness or incapacity. Fearing she would be sent away, she got from a high shelf a bottle labelled "Laudanum—Poison," and took (so the doctor said) enough to kill a man; but her mistress promptly trotted her off to the police-station at Holloway, where Inspector Knight liberally supplied her with hot mustard-and-water. This acted as an emetic, and the girl recovered. It transpired that the girl is a West Indian by birth, her mother a native, and her father an English seaman. Miss Gover (of St. Giles's Christian Mission) pleaded for the prisoner, and the magistrate allowed this lady to take her away.

The Separate System of Supplying Drugs.

At a meeting of the Dartford Board of Guardians on Saturday, May 7, Dr. Nutting wrote with respect to a cheque which had been sent to him for 25*l.* for a quarter's salary, whereas it should have been paid at the rate of 90*l.* a year. Messrs. Wilson & Botwood, chemists, of Hythe and Spital Streets, having been appointed to supply drugs which had been formerly supplied by the doctors. He, therefore, returned a cheque for 2*l.* 10*s.* It was then elicited that the new arrangement had not turned out advantageously, as the bill of Messrs. Wilson & Botwood already amounted to 6*l.* 5*s.*

An Overdose of Chloral Hydrate.

Mr. Denis William Donovan, house-surgeon at the Public Dispensary, Worktop, Notts., went to London, on April 30, for an examination for which he had been studying. He returned home on Friday last, and, complaining of feeling very tired, he went to bed. He seemed low and under some apprehension that he had not been successful. He got up on Saturday morning but went to bed again, and in the afternoon he mixed himself a dose of antipyrin. Later at night he went down to the surgery, and a little later, when his housekeeper went to his bedroom, he appeared asleep. On Sunday morning, when she visited him again, he was in the same position, but dead. Dr. Montague found on the surgery counter a bottle of chloral-hydrate crystals without a stopper, and some of the crystals were scattered about. In his opinion death had resulted from an overdose of that medicine. The jury endorsed this view.

A Chemist's Wine-licence.

On Friday, May 6, Messrs. Savory & Moore, chemists and druggists of New Bond Street, applied to the magistrates for the parish of St. George's, Hanover Square, that the condition on their licence, which had been granted to them by the Excise for the sale of wines and spirits for medicinal purposes only, should be so altered as to remove the restriction. The justices, however, refused to grant the application.

Birmingham Notes.

The recreation section of the Midland Counties Chemists' Association is to be divided as follows:—1. Cricket, W. Asten, Coventry Road, secretary; 2. Tennis, J. T. Cattell, Great Lister Street, secretary; and 3. Cycling, W. C. Scott, 316 Wheeler Street, Lozells, secretary. A half-crown subscription has been fixed, and Mr. Solomon Taylor, 52 Moor Street, has been appointed general secretary. The season commenced on Wednesday.

The annual meeting of this Association will not be held next week, owing to the Pharmaceutical Society's meeting in London. May 26 is fixed as the date; business at Mason College at 6.30, and supper in the Colonial Hall, New Street, at 8 P.M.

Mr. Lear, who for many years owned the business now carried on by Mr. Blunt, Coventry Road, has opened a new shop at Hay Mills, a small village near Birmingham.

Competition is becoming very keen in the Stratford Road suburb. A large and well-appointed pharmacy has been started, and the local men have to look to their laurels. Mr.

Thompson has just put up a large gilt wood sign with the number of his shop and the legend, "STORE PRICES." *Sic gloria, &c.*

Mr. Saul's sarcastic references to the aptitude of the average pharmaceutical student is taking effect here. One pupil ended his customary five years' apprenticeship in the pharmacy, and has become a jeweller; a second has passed into the bakery line; a third, a clerk in a wholesale warehouse; a fourth has gone to sell hacon; and a fifth blacks boots at one of the hotels during the morning, and applied to an analytical chemist to fill up his time, because he said he was a good dispenser and prescriber. Many are becoming dentists, and not a few have entered the medical school as *embryo-medicos*.

Mr. Ambrose Hartill, chemist, Coseley, has undertaken to collect 100*l.* for Communion plate for Coseley Church, and has already purchased several of the pieces necessary to make the set.

A local photographer, taking advantage of the recent advance in photographing in natural colours, has filled his window with some specimens of what he calls chromo-electro-type photography in natural colours, the price of which is one guinea each portrait. They are certainly beautifully executed, and form pretty pictures, but they can scarcely be called photography.

Selling Cyanide of Potassium.

On Thursday of last week a Birmingham jeweller, named Michael Joseph Goldsmid, was robbed in Manchester of jewellery of the value of 2,000*l.* The jewellery was contained in sample cases which had been left on a handcart in the street in charge of a porter. While the porter was inspecting the window of a shop the cases were snatched from the cart and nothing has been seen or heard of them since. On the following morning Goldsmid was found dead in bed at the Spread Eagle Hotel, Manchester. At the inquest on the body, one of the witnesses was Mr. Fletcher Rix, chemist, 2:8 Deansgate, manager of the business of the late Mr. Holt, who said he sold to deceased about four o'clock on Thursday afternoon an ounce of cyanide of potassium, which he said he wanted for cleaning jewellery. Witness at first refused to supply him, as he did not know him, but Goldsmid afterwards brought an assistant from Mr. Percy, pawnbroker, whom witness knew. He was then supplied with the cyanide after signing the register. With this it appeared deceased had poisoned himself.

An Uncontrollable Impulse.

At the Bristol Police Court on Tuesday, Frederick George Ling, a chemist's assistant, was summoned for indecency towards a child named Emily Louisa Rose Hann, aged 8 years, but the prosecutor wished the summons to be altered, so as to reduce the charge to one of common assault. This was in consequence of inquiries having shown that the prisoner had been suffering from an illness which had affected his brain. The child having given her evidence, Mr. Clifton, for the defence, said that for two years the accused had suffered from serious head-trouble which had necessitated several painful operations. On the day in question he was apparently seized with an uncontrollable impulse. Defendant had always borne an excellent character. The bench thought the case could not be dealt with by a fine, and sentenced defendant to a month's hard labour.

Alderman Walter Vaughan Morgan.

A wardmoote was held in the vestry-room of St. Mary-le-Bow on May 9 for the election of an alderman to succeed Lieut.-Colonel Cowan, the representative of Cordwainer Ward. Colonel Cowan's name stood first on the list of the aldermen who have not passed the chair, and he would probably have been elected to the mayoralty of the City next year in the ordinary course. But for private and business reasons Colonel Cowan has resigned his seat, and Cordwainer had to choose another alderman. At the wardmoote referred to the vacancy was filled by the unanimous selection of Mr. Walter Vaughan Morgan, of 42 Cannon Street. The Lord Mayor, who presided, and whose business is in the same ward, remarked, in winding up the "mote," that, with the exception of himself, Mr. Morgan would be the only alderman who was actually a resident of the City. One fact that especially commended Mr. Morgan, as far as he (the Lord

Mayor) was concerned, was that he was a Welshman. When he (the Lord Mayor) was elected to the position he had now the honour to hold, he was, he believed, the first Welshman who had been appointed for some centuries as the Lord Mayor. In the alderman-elect of that day, however, they had a gentleman who could truly claim Welsh nationality, for he was of Welsh parentage, and had, moreover, the advantage of having been born in the Principality.

Mr. Walter Vaughan Morgan, who was thus elected an alderman of the City of London for the ward of Cordwainer, is the eldest surviving member of the firm of Morgan Brothers, once wholesale druggists' sundriesmen, subsequently merchants, founders of the business now carried on by the Morgan Crucible Company (Limited), and the firm which thirty-three years ago established this journal. Mr. Morgan was born at Glasbury, Breconshire, in 1831, and was educated at Christ's Hospital. He spent his last night in that institution as a boy on Easter Monday,



1846, and on Easter Monday, 1891, he entered into residence as treasurer of the Hospital, to which honorable position he had been unanimously elected by his fellow governors on the retirement of Mr. J. D. Alcock. Mr. Morgan is a Freemason of many years' standing, has twice been Master of his lodge, and has also occupied the principal's chair in Royal Arch Masonry. He is besides a director of the Hudson's Bay Company and a member of the Worshipful Company of Cutlers. His qualifications for the position to which he has just been elected are recognised by all who have come into association with him, both in public and private. At the age of twenty he was the chief cashier in the National Provincial Bank of England at Manchester, and since then in his own businesses and on the important boards he has named his ability as a financier and administrator has been most marked.

The Lord Mayor and the Lady Mayoress will give a dinner at the Mansion House on June 3 in honour of the alderman-elect.

Sudden Death at a Chemist's.

A sad case of sudden death occurred in the shop of Messrs. Thurland & Son, chemists, 10 Magdalen Street, Oxford, on Wednesday afternoon. About three o'clock Mr. W. Lidington, landlord of the Spread Eagle, Thame, called

at the shop and complained of a pain at the chest. Mr. Thurland supplied him with a simple remedy, but this afforded him no relief, and he continued to beat his chest with his hand, and gradually sank from the chair on which he was sitting to the floor. Mr. Drew, surgeon, was sent for, but death ensued immediately after his arrival.

Irish News.

The Recent Pharmacy Act Cases.

The Dublin *Evening Telegraph* has published several letters in reference to the statement in *THE CHEMIST AND DRUGGIST* that "the terms of settlement included an understanding that the Society were not to publish the cases in the Dublin papers." Mr. Hayes, the President of the Pharmaceutical Society, signs one of these letters, in which he says the statement was "entirely unauthorised." That is so; our news is the best that can be got, but authorised information is often rather bare. Mr. Hayes says, further, that "no such understanding or intention ever entered into the minds of the Council or its Law Committee." This assertion seems a little unconsidered in view of the lengthy narrative of the circumstances unfolded by Mr. Hayes himself in the Irish Council—a report of which appears this week—and it certainly is not the impression of Mr. Boyd. Our correspondent sends us the grounds for the statement, which are curious, but which we do not care to publish at present.

The Contract Battle Still Undecided.

The contract for the North Dublin Union is still awaiting confirmation. At the last meeting of the Guardians a letter was read from the Local Government Board, enclosing a letter addressed by them to Mr. Samuel Boyd, an *ex-officio* member of the Board of Guardians, stating that he, being an *ex-officio* guardian, could not resign his position on the board until September 29 next, the end of the year. It appeared, therefore, that his firm could not take the medicine-contract which had been awarded to them. It was stated that they had not signed their bond for the contract, and it was decided if the bond were not signed at once to give the contract temporarily to Messrs. Leslie. Messrs. Leslie & Co. had written to say that, as some of the guardians appeared to be under the erroneous impression that the prices named in Messrs. Bollean & Boyd's tender were lower than theirs, they would be only too happy to accept the contract at the prices stated in Messrs. Bollean & Boyd's tender.

Registered Druggist Examinations in June.

Thursday, May 19, will be the last day for receiving applications from intending candidates.

Scotch News.

Destructive Fire in Glasgow.

A fire of a destructive character broke out on Sunday morning in the premises of Messrs. Baird & Tatlock, scientific-instrument makers and chemists, 40 Renfrew Street, Glasgow, by which damage amounting to 2,000*l.* was done. The building consisted of four flats, and the three upper ones were occupied by Messrs. Baird & Tatlock. The outbreak took place on their show-room flat, where there was a large quantity of chemicals. For the most part the flames were confined to the one flat, but the other floors were damaged by heat and water.

Carnoustie.

Mr. William Nicol asks us to state that he simply sold Mr. Henderson his stock and fittings three years ago—nothing was paid for goodwill. The shop which Mr. Nicol is now to occupy is his own property, and that is the sole reason why he has selected it. From another source we learn that Mr. Henderson has taken a shop at the extreme west end of the town.

Aberdeen Notes.

The Aberdeen chemists have agreed that their annual picnic shall be held at Braemar, on Wednesday, July 6. The company will proceed by rail and coach, and will dine on arriving at the Invercauld Arms Hotel. Thereafter they will drive to Linn of Dee, or those who like it can go mountaineering. Members of the craft will, as usual, be welcomed, and may address either the Convener, Mr. John Cruickshank, or the Secretary, Mr. A. Strachan, who will give particulars.

The successful contractors for the Old Machar parish medicine contracts are Mr. A. M. Shepherd, for House and South Division; Mr. B. Hall, Woodside, for North Division; and Mr. H. Milne, for Old Aberdeen.

Edinburgh Botanical Excursions.

The committee of the Assistants' and Apprentices' Association have arranged the following botanical excursions:—

Date	Place	Meet at	Time	Return
May 25 ..	Colinton Dell	Waverley station (suburban)	5.45 A.M.	8.5 A.M.
June 15 ..	Duddingston Loch	Duddingston church	8.45 P.M.	By road
" 29 ..	Colinton Dell	Caledonian station	8.30 P.M.	" "
July 13 ..	Lavershall Craigcrook	Waverley station	8.15 P.M.	10.45 P.M.
" 27 ..		Caledonian station	5.45 A.M.	7.51 A.M.

Glasgow Changes.

Mr. M. F. Thompson, chemist, 17 Gordon Street, Glasgow, has purchased the old-established chemist's business at 609 New City Road. The Glasgow Medical Hall Company intimate that they are removing from their present premises at 140 New City Road to a new shop at 253 in the same street.

The British Pharmaceutical Conference.

A meeting of the local executive of the Pharmaceutical Conference was held in Edinburgh on Wednesday to consider arrangements in connection with the gathering. It was agreed that the Waterloo Hotel should be the headquarters of the Conference, and that the reception should be held in the Waterloo Rooms on August 22, where also the meetings will be held. There will be two afternoon excursions, one to Dalmeny (the seat of the Earl of Rosebery) and the Forth Bridge, and the other to Roslin and Hawthornden. The whole-day excursion will be to Loch Tay, the journey being via Stirling and Callander and the Pass of Leny.

French Pharmaceutical News.

(From our Paris Correspondent.)

EXPLOSION THROUGH CARELESSNESS.—An explosion occurred on Thursday last at M. Biard's chemical and colour warehouse, 9 Rue de Jouy, next to the Pharmacie Centrale. Two workmen were pouring spirit from one receptacle to another imprudently near a coke fire. A sudden draught brought the fire to the inflammable vapour, a loud detonation taking place. The two men, and a woman who was near, were badly burned about the face and hands.

A WIDOW'S BUSINESS EXPERIENCE.—The proprietor of a dispensary at Chambéry having died, his widow continued the business, having a qualified assistant in charge and ordering medicaments in her own name. A wholesale drug firm at Lyons supplied the goods desired. But when they presented the bill the fair doctor failed to meet it, alleging that she was merely acting on behalf of her children. These, being under age, could not be sued. The Tribunal of Commerce, however, took the common-sense view that "who orders pays," and the lady has been ordered to settle her accounts, plus costs.

PHARMACISTS AND THE INLAND REVENUE.—The "stamped paper," dear to red-taped French bureaucracy for the draw-

ing up of everything from a birth certificate to a last will and testament, is apt to be pushed sometimes to extremes. A pharmacist at Damville (Eure) was recently condemned to a 5*l.* fine for having given, on unstamped paper, the necessary certificate to one of his employes that he had duly passed the requisite number of years in his pharmacy. The Norman is proverbially a keen business man, and feeling the injustice of such petty persecution the pharmacist petitioned the Ministry. He has just received notice that the fine is remitted, and that all he will have to pay is one shilling for the registration of the paper in question.

Foreign and Colonial News.

QUININE IN MASHONALAND.—According to the *Mashonaland Herald*, the photographed journal of British Zambesia, quinine was lately sold by auction at Fort Salisbury at 8*s.* per oz., tea brought 30*s.* "per box," and sauce 20*s.* per dozen.

WORKING AT A LOSS.—The working of the Chemische Fabrik, late Hoffmann & Schoetensack, in Mannheim, shows a net loss of 128,290*m.* in 1891, against a net loss of 62,837*m.* in 1890. To cover this loss 103,211*m.* have been drawn from the reserve fund. The share capital of the company is 900,000*m.*, and at the end of the year the liabilities were 100,000*m.* upon mortgages, and 334,576*m.* to general creditors, against assets amounting to 370,612*m.*, estimated stock value, and 224,562*m.* in book-debts.

POISONED WITH VITALINE.—Colonel Gresser, the Prefect of the Russian police, has died from blood-poisoning the result of injections of a new quack remedy called vitaline, which has lately been much puffed by the St. Petersburg press, but which now turns out to be glycerine and borax. It appears that Colonel Gresser was suffering from rheumatism, and he injected vitaline with a syringe supplied by M. Gatchkovsky, the inventor of the medicine. It is supposed that the syringe was not clean, and hence the blood-poisoning. The inventor of vitaline is under arrest, and the sale of the medicine is stopped.

THE NEW ARGENTINE SALT-INDUSTRY.—The Rio Negro Salt Company in the Argentine Republic, of which we gave an account recently, now supplies the market with more than 50 tons of salt a day. It is brought to the company's stores at the Boca, where, immediately on being landed, it is dried in large kilns. Afterwards it is purified, and separated into different classes—viz., fine table salt, refined salt in barrels, common salt, and salt specially prepared for the "saladeros," or meat-curing establishments, for which purpose it is considered quite equal to the foreign salt, and is much cheaper.

SEQUAH AMONG THE DUTCH.—In Holland the Customs officers have the right to appropriate any goods (liable to Customs duty) imported into the country upon payment to the importer of the sum declared by him to represent the value of the goods. Most of the duties are levied at the rate of 5 per cent. upon the declared value of the goods, and the object of the rule is, of course, to prevent importers from declaring merchandise below its real value. It is now pointed out in the Dutch papers that Sequah (who is still touring in the Netherlands) recently imported 40,000 bottles of his oil, and declared the value, for Customs purposes, at 7 cents, or rather less than 1½*d.* per bottle, whereas the retail price is 2*s.* 1½*d.* per bottle. The importer is asked to explain the difference, but has failed to do so, no doubt because of his unfamiliarity with the language. Meanwhile he continues to draw crowds wherever he goes. At the Hague a band of lady admirers presented him solemnly with a gold medal; and in Amsterdam General Booth, who happened to pay a visit to that city a few days after Sequah's triumphal entry, was received in all the populous quarters with enthusiastic cheers for Sequah, the crowd being under the impression that the two visitors from Britain represented the same concern.

AN INSECTICIDE has recently been patented in U.S.A. which is a mixture of extract of horse chestnuts and a solution of resin.

Pharmaceutical Society of Ireland.

COUNCIL MEETING, MAY 4.

THE PHARMACY ACT PROSECUTIONS AND THE REPORT IN "THE CHEMIST AND DRUGGIST."

THE PRESIDENT said: Before the business of the day is entered upon I think it right to make a statement with regard to the prosecutions to which you gave your assent at the recommendation of the Law Committee at the last meeting of the Council. It is with a mingled feeling of pleasure and pain that I announce that those prosecutions have been concluded—of pleasure because this very unpleasant work has been brought to a close by the submission of all those against whom summonses had been issued for breaches of the Pharmacy Act without having the cons and pros argued before the legal tribunal, with the consequent publicity in the press, which would be regarded by those concerned as undesirable and probably injurious; but of pain that any of our associates should have been subjected to prosecutions by their own Council, whose desire would have been to take a position of parental cherishing of their children rather than of correction and chastisement. The cases were similar in this respect that the parties were all breaking the law, although they were unlike in the *modus operandi* of the disobedience. I think it right to state the issues in the three cases, in order that our licentiates in general, and the chemists and druggists in particular, may distinctly understand what is legal and what is not legal; and if these and somewhat similar cases tried and determined some six months ago are not sufficient warning to evil-doers, they will only have themselves to blame if a worse thing befalls them. The recent prosecutions were cases of (1) a qualified and unqualified partnership; (2) a chemist and druggist with a special dispensing department managed under the name of and by a pharmaceutical chemist; and (3) of a chemist and druggist and a registered druggist having an M.D. of Trinity College, Dublin, who is registered as a pharmaceutical chemist—but who resides in another country—in the partnership, and carrying on the dispensing business, and also using the title of "pharmaceutical chemists." The first of these classes was represented by the case of Mr. George P. Beater, who, on hearing that the Council had instituted proceedings for what he was not aware was in any way illegal, as he took no part in the business, at once consented to pay a fine for the alleged breach of the law and retire from partnership with Mr. Hardy, a licentiate of our Society. The dissolution was gazetted within a few days after the institution of the proceedings, and thus all cause of complaint was removed. I think we may congratulate both Mr. Beater and Mr. Hardy on their keenness of perception and promptness of action and on the happy solution of a difficult problem. The second class is represented by the case of Mr. Charles Johnston, who thought his position was unassailable, and that his having been left fourteen years without molestation was, to his mind, proof that the Council thought so too. But when he found his position untenable he at once bowed to the inevitable, paid his fine, and gave an undertaking to relinquish his dispensing department. Under class 3 comes the case of Messrs. Boyd & Goodwin, whose firm is represented by Mr. Samuel Boyd and his son, Mr. Walter Boyd, who, in addition to compounding prescriptions, were using the title of "pharmaceutical chemists." This, I cannot avoid stating, was a case that has caused the Law Committee great anxiety, and they have given it much thought and consideration. Complaint after complaint by licentiates of our Society was laid before our committee of illegal dispensing on the part of those gentlemen, and our licentiates complained bitterly of the inaction of the Council. Several cautionary notices were sent to the firm, but without producing the desired effect. There was then a period of rest in the way of prosecution; but the committee at last felt that it would be most unfair to the Council and its licentiates any longer to hold back from doing its duty, painful and unpleasant though that was. In this, as in the previous cases, the Messrs. Boyd submitted to the penalties, and earnestly requested that the matter should be settled out of court, which the committee—acting under the advice

of Mr. Clay, our solicitor—consented to, on their paying the fines and the costs and giving an undertaking not again in any way to break the law. The following is the undertaking which was drawn up by Mr. Clay:—

April 28, 1892.

SIR,—In consideration of your withdrawing the summons you have issued against me for an infringement of the Pharmaceutical Acts, and accepting the penalty I have incurred, with costs, I hereby undertake, from this date, to give up compounding prescriptions, or in any other way infringing the said Pharmaceutical Acts as now in force in Ireland.

Yours truly,

WALTER BOYD.

To the Secretary of the Pharmaceutical Society Ireland.

The cases against those three gentlemen were consequently withdrawn; a representative from Messrs. Casey & Clay went down to the police court; and when the cases were called, I think the words he used were "withdrawn and settled." In *THE CHEMIST AND DRUGGIST* there has appeared a short statement with reference to these cases, which in some respects is correct, but in others incorrect. There is the following paragraph at the end of the report:—"The terms of the settlement included an understanding that the Society were not to publish the cases in the Dublin papers." I may say, on behalf of the Law Committee, at every meeting of which, with respect to this case, I was present, that no such undertaking or understanding was arrived at by them, nor did they give any permission to that effect. The only thing that in my mind could have left any such impression on any of the persons concerned was a statement that I made to Mr. S. P. Boyd when he was in my office asking me to withdraw these cases from the police court. I replied that if he submitted it might prevent undue publicity in the Dublin press; but as to giving any undertaking, it was the last thing in my mind. Consequently, anyone who thought that any such undertaking was given would be under a serious misapprehension. Following this up, Mr. Boyd went to Messrs. Casey & Clay. What passed between them I don't know, but Messrs. Casey & Clay have written to Mr. Ferrall the following letter:—

21 St. Andrew Street, Dublin,

May 2, 1892.

DEAR SIR,—Mr. Boyd has been with us to-day very much annoyed at what he calls a breach of faith by the publication by your Society (because it could only come through one of the members of the Council) of the three cases in which the summonses were agreed to be withdrawn without any publication, and he demands a written explanation from us. We certainly must say that we know nothing about who gave the information to *THE CHEMIST AND DRUGGIST* which justifies the report on page 623. Will you be good enough to ask the Council to place us in a position to reply to Mr. Boyd, who charges us with a gross breach of trust?

Yours faithfully,

CASEY & CLAY.

P.S.—We think it right to state that so far as our assistant's action in the matter is concerned, the report is deliberately untrue. He simply asked leave of Mr. Swift to mention the cases. Mr. S. affix said, "Yes," and our assistant only stated that "they had been settled"—nothing more.—C. & C.

Now I don't know, Mr. Boyd, whether you consider that you wrote this other letter to me personally or not?

Mr. BOYD: You may read it.

THE PRESIDENT: Without Mr. Boyd's leave I would not read this letter, though I don't think that I ought to have been subjected to Mr. Boyd's strictures in my endeavour to act fairly between my Council and an individual member:—

18 Leeson Park, Dublin,

May 2, 1892.

DEAR MR. HAYES,—I am more than surprised to observe in last Saturday's issue of *THE CHEMIST AND DRUGGIST* a report of what is said to have taken place in the Dublin Police Court on Thursday last. As a matter of fact, these cases were withdrawn. They were not called at all. I consider the publication a direct breach of the understanding between us, and I cannot easily forget your conduct towards me, as a colleague on the Council, in this matter from the start. The report is also misleading in the extreme, for it says nothing whatever about the qualified partners in the firms mentioned, nor does it state that this is the first time the Society has asserted its claim that every partner in a compounding establishment shall be a qualified pharmacist. You will, no doubt, agree with me that the report should be corrected in the next issue of *THE CHEMIST AND DRUGGIST* and the *British and Colonial Druggist*, and that an opportunity should be taken to caution firms that the Council intend to prosecute in all cases where there is an infringement of section 30 of

the principal Act as amended by section 17 of the 1890 Act, which are, I suppose, the sections by which you are advised we have those powers. As far as the letter applies to the recent prosecutions, I think I may fairly claim to see it before it is sent.

William Hayes, Esq.

Yours faithfully,

SAMUEL P. BOYD.

P.S.—I think Mr. Purcell's opinion should also be made public.

With regard to Mr. Boyd's statement that he considered the publications a distinct breach of an understanding between us, I distinctly say that as to an understanding that nothing was to be published, nothing was farther from my mind. Mr. Boyd's reference to my conduct as his colleague on the Council I don't understand. My conduct, I hope, has been that of a consistent man—(hear, hear)—acting as President of the Society without fear or favor, and doing my duty; and I am not afraid of my conduct being impugned by Mr. Boyd, or anyone else, because I feel that I have acted consistently. Had I gone to Mr. Boyd and told him what proceedings were to be instituted I should have done a distinctly wrong act. With reference to Mr. Boyd's claim to see anything that I wrote before sending it, if he is appointed by the Council to inspect anything that I send, I shall certainly submit; otherwise I will not be dictated to by anyone.

Mr. BOYD: I don't think there is any attempt at dictation in my letter.

The PRESIDENT: Next as to the prosecutions in the Southern provinces. We have not so good a report to make as to these, for the gentlemen prosecuted there have been making interest with their friends on the bench and in other ways to obtain an extension of time. You are aware that we obtained a judgment against Mr. James Selkirk for breaking the law, but that gentleman lodged an appeal. That appeal was not heard in due course, but has been put off until June next. We then proceeded against his brother, Mr. William Selkirk, a registered druggist, for illegal compounding. His solicitor applied for a postponement until after the brother's appeal had been heard; but although Mr. Gardiner, the stipendiary magistrate, was very anxious that the case should be heard, the honorary magistrates overruled him, and the case has been postponed until after the appeal case shall have been heard. Of course this adds to the expense, but I think I speak the mind of the Council when I say that, no matter what may be done in these cases, we are determined not to rest until the law has been carried out to its fullest extent. (Hear, hear.)

Mr. WELLS: Allow me to add that I think the Bench is influenced in those cases; and I hope that if there be any means of bringing pressure on the Government to induce them to look into the matter, we will avail ourselves of it. (Mr. Wells then read a part of the report of the proceedings the last time the case was before the Cork magistrates.)

Mr. BOYD: I should like to know how the report got into THE CHEMIST AND DRUGGIST. Has the President any information as to that?

The PRESIDENT: I think the *Freeman's Journal* had a reporter there, and I think THE CHEMIST AND DRUGGIST had a reporter there. We did not send the report, nor had we anything to do with the sending of it.

Mr. BOYD: The distinct understanding in Mr. Clay's office was that the cases were to be withdrawn. I inferred from that that it meant an absolute cessation of publicity in the matter; and on that condition my father consented to bear those penalties and to pay the costs and give the undertaking. Certainly if it had been left in my hands, and if there was no understanding of that sort, I should have advised him to defend the case on this ground—that it seems to me that it is only since the passing of the Amendment Act that the Society has been empowered to prevent the compounding of prescriptions on premises of which pharmaceutical chemists are not the sole proprietors. It is only under the 17th section of the Amendment Act that they have been able to stop it. My contention may be right or it may be wrong, but I say that the object of that clause is to put the responsibility of the retailing on the proprietor of the establishment; and I was a party to its being put into the Act. But what I complain of as a member of the Council is that such a course should have been taken when gentlemen here know perfectly well that if my father had been written to, or if he had been told that there was something illegal being done, he is the first man in Dublin that would have ceased to do it. I say the proper course for the Law Committee to have

taken was to have written a letter to Messrs. Boyd & Goodwin.

Mr. WELLS: We did so.

Mr. BOYD: Excuse me. Allow me to go on. The proper course would have been to have written a polite letter to Messrs. Boyd & Goodwin saying, "We are informed that you are acting contrary to the law, and we feel it our duty to warn you that in the event of such-and-such a thing not being done within a certain time we shall be compelled to prosecute." Instead of that what is done? There is this Star Chamber business, and then the Committee launch three summonses at my father.

Mr. WELLS: No—two.

Mr. BOYD: Mr. President, will you kindly ask this gentleman not to interrupt me? I say that as a member of the Council and a colleague of these gentlemen on the Law Committee—and I speak as well for myself as taking my father's place in the matter—that I was entitled to some little consideration, and I say that it is a gross scandal, and won't be to the credit of this Council.

Mr. WELLS: Oh, question, Mr. President! I say that must be withdrawn. I don't think we should allow such language against our members.

The PRESIDENT: I am quite willing that Mr. Boyd should use such language towards the Council. We shall leave it to our constituents to say who is right in this matter. I think the scandal is on Mr. Boyd's part. I for one feel that we have acted perfectly *bona fide* all through. Had we acted otherwise than we did, we should have been doing what was wrong.

Mr. BOYD: Well, see—I was interrupted by Mr. Wells, who said that they sent some cautionary notices to Boyd & Goodwin. As far as I have been able to gather—and I have made some inquiries—no cautionary notices have been sent for the last six years; and I must repeat that I have spoken to several persons over this matter, and the general opinion is that I, as a member of the Council, have been treated scandalously and shamefully by my colleagues on the Council. I cannot help being thoroughly indignant about it; and I am sure there are gentlemen on this Council who will agree that if notices such as I suggested had been sent to Boyd & Goodwin, and to the other firms, none of them would have broken the law. I am quite satisfied that if it had been pointed out to them that they were doing an illegal thing, they would have ceased from doing it. But they were not posted up in the changes that have taken place in the law, and the result is that they have been infringing the law, and I quite acknowledge it. I was the first to see that having broken the law they should give an undertaking and pay the penalties. But the fact is that my treatment by the Council has nothing whatever to do with the right and wrong of the case; my contention is that as a colleague I had some right to consideration—that I should not have been placed in the position of prosecuting my own father, for that is what it comes to.

Mr. BEGGS: If Mr. Boyd had been present at the whole of our last Council meeting he would have heard the report of the Law Committee, in which mention was made of the prosecutions; but he left before that report was brought on.

Mr. BOYD: I quite acknowledge that I should have remained until the meeting concluded; but I was not able to do so. Even if I had been here and had protested, and asked the Council to send a cautionary notice to the firm, I question very much whether my doing so would have been of any use.

Mr. WELLS: No use.

Mr. MERRIN: After the previous prosecutions the Vice-President pointed out distinctly that no firm could let a portion of their shop to a qualified man to carry on dispensing; and one of the gentlemen who has been now prosecuted was sitting in the chair where Mr. Boyd now is, and heard it all distinctly.

Mr. WELLS: It is my duty, having had an active part in these prosecutions, not to allow Mr. Boyd's statements—a great many of which are totally devoid of fact—to go without contradiction. In the first place, it was while the President was away that the Law Committee were first instructed to take up these prosecutions. I had them in hand before the President came home; and at his request I continued to go on with the cases and prepare them for the Court. So

that our President had very little to say to these prosecutions until a few weeks since, when he came to us and acted as president of the committee. Mr. Boyd has made a statement, which I say is altogether unfounded. He says that, when we settled the cases, it was understood in Mr. Clay's office that there was to be no publication.

MR. BOYD: Excuse me—the cases were withdrawn.

MR. WELLS: Allow me now. I say that at the interview, when Mr. Boyd was present, and Mr. Grindley and the President were present, the question of publication was never mentioned; and if it had been, our committee would not have acquiesced on any account. You have all read the report of the Law Committee, in which we explain that we would not submit to anything but the publication of these cases. What is our object? Not to take the money of Mr. Boyd, or any other man. We don't want their money. We want them to respect the law; and our object was simply to punish them, and to let the public know that they were doing wrong.

THE PRESIDENT: I think you are not quite correct in saying "let the public know." I think what we wished was that those who are in trade as chemists and druggists and registered druggists should know. We did not wish in any way to injure the business of Messrs. Boyd & Goodwin or any other gentleman.

MR. WELLS: Messrs. Boyd & Goodwin were doing a business that they had no right to do, and the public would have some trouble in detecting the fact. What I had in view when I assisted to pass the resolution was not to get their money, but to make an example of them and punish them for doing wrong by making them give it up, and to let other people through the country know that we were prepared to do the same thing with them. There wasn't a word, right or wrong, about the thing not being published.

MR. BOYD: Where did the man who wrote the report get his idea about non-publication?

MR. WELLS: I have another question to ask you.

MR. BOYD: I don't know where this report came from, but whoever wrote it was distinctly of opinion—and his opinion confirms my statement—that the object of having the cases withdrawn was to avoid the publicity which they would otherwise have got, and if, as the President states, his desire was to deter others from doing what is wrong, the details of the cases should have been given. The report that appeared in *THE CHEMIST AND DRUGGIST* is not of the slightest use to deter others. Anybody who read it would simply come to the conclusion that Mr. Samuel Boyd, as an ordinary chemist and druggist, was compounding prescriptions. There is nothing whatever said there—

THE PRESIDENT: I don't think we can have this wandering discussion. If you want to get information about the report, the only person you can get it from is the editor of *THE CHEMIST AND DRUGGIST*. He has a representative in Dublin.

MR. BOYD: The fact that whoever sent the report made the statement that it was not to be published in the Dublin papers confirms me—

MR. WELLS: The editor of a Dublin newspaper who was in court says he was told that the Society had come to this arrangement. I deny that the Society came to such an arrangement, and I ask where that information came from?

MR. BOYD: It certainly did not come from me, for I was not in court at all.

MR. WELLS: I have made the statement deliberately—and let Mr. Boyd contradict it if he can—that while we were present with Mr. Clay he never mentioned the matter of publication at all. Then he says that, as a member of the Council, he is entitled to get more consideration than other gentlemen. I object to that. We are here as honest men to do an unpleasant duty; and if it were Mr. Hodgson himself, one of the most respected men on the Council, that was to be prosecuted to-morrow for any supposed breach of the law, any of us who should give information to Mr. Hodgson beforehand would be acting most dishonourably. We have no right to inform anybody of what takes place here. Unpleasant duties come on us here, and we must do them like men; but if we had done what Mr. Boyd suggests, we would have been branded—

MR. BOYD: What I suggest is that official information should have been given by the Registrar, and that not only to Messrs. Boyd & Goodwin, but to the others.

MR. WELLS: I say that no official information should be sent to anyone.

MR. BOYD: An official caution.

MR. WELLS: Mr. Boyd says that his father would not do what is wrong. (Refers to minute book.) In April, 1882, the Council, after Mr. Goodwin's death, wrote to Messrs. Boyd & Goodwin to know by what right they compounded prescriptions, and on April 24 they replied, saying: "In reply to your letter of the 21st inst., the business is carried on by the surviving partner of the firm under the supervision of a duly qualified pharmaceutical chemist." The Council wrote to say that that would not do, and a letter came in reply, signed "Boyd & Goodwin," saying that "our Mr. Boyd, jun., is going forward for examination in July next, and we shall consider it a favour if you will allow the compounding business to go on as heretofore till then." The reply of the Council was "that the receipt of Messrs. Boyd & Goodwin's letter be acknowledged, and that they be informed that this Council cannot be a party to any illegal action committed by them." We never had the scratch of a pen, so far as appears, in reply to that from Messrs. Boyd & Goodwin as "Boyd & Goodwin"; but at the same time we wrote to Messrs. Boileau & Boyd—

MR. BOYD: This is not relevant at all. It is ancient history.

THE PRESIDENT: It has this to do with it—that in one case where a qualified partner left the firm, the surviving partner acknowledged that the dispensing business was unlawful and gave it up; and in the other case, which was precisely similar, the party acknowledged that it was wrong but kept it on.

MR. WELLS read a letter saying, "We are in receipt of your letter relative to our compounding, and, in reply, beg to say that we shall discontinue it." Mr. Boyd was the owner of both places after Mr. Goodwin died and Mr. Boileau left. I find that in July of the same year it was again reported to the Law Committee that notwithstanding those letters, Messrs. Boyd & Goodwin were still—

MR. BOYD: Kindly give the year.

MR. WELLS: The same year—1882. There is then a statement that the firm were to be tested.

MR. BOYD: Is there any use in going into this ancient history?

MR. WELLS: Oh, no! Always avoid what shows you up.

MR. BOYD: Show up anything you like as far as I am concerned.

MR. WELLS: You say that we ought to go on giving a man notice after notice.

MR. BOYD: After ten years' interval.

MR. WELLS: During those ten years we have been trying Messrs. Boyd & Goodwin's firm time after time, and I and other persons have seen bottles compounded by them for other persons. Then to avoid the Act they got up a partnership with a young gentleman who, as far as we understand, was never behind the counter; and they not only did that but they used the title, "pharmaceutical chemist," as large as life on all their labels. Under these circumstances, it is impossible for Mr. Boyd to say that his firm were not cautioned. As for the summonses, there were two taken out for compounding in each of the three cases; and there was a third in Messrs. Boyd & Goodwin's case, because they called themselves "pharmaceutical chemists" on their labels and envelopes. I know it has been said that I have an ill-feeling against Mr. Boyd and others, because I worked in these prosecutions; but we are doing our duty, and we don't care what people say. Let them do what is right, and not throw stones at us.

THE PRESIDENT: I wish to know, Mr. Boyd, why your father has not yet signed the undertaking?

MR. BOYD: I did not know, sir, that that was the case. I shall get it done. There is one statement in Mr. Clay's letter that is not correct. I did not demand any writing. But what I want to point out is that I was distinctly under the impression that these prosecutions were under section 17 of the Amendment Act. If the Council had power under section 30 of the old Act to do what they have done, why did they not do it long ago?

MR. WELLS: That is answered by what I have already stated. Mr. Boyd, of the firm of Boileau & Boyd, admitted our right in 1882 to stop them, for they gave an undertaking to give up compounding, and Mr. Boyd will find that in the

prosecutions of last September the summonses were under section 30 of the old Act.

Mr. BOYD: My father was certainly under the impression that the state of things had distinctly changed since that undertaking was given in 1882, and that his having a qualified partner in the concern altered the circumstances.

The PRESIDENT: It did not alter the circumstances in any case. Many of those who were similarly circumstanced put themselves in the right by acting according to the law. So far back as 1878 a series of questions were submitted to Mr. Parrell, Q.C., and amongst others this: Whether a partnership was lawful if one partner was qualified and the others not?—and his answer was that such a partnership was not lawful. It was on that ground that we took the matter up in all these cases.

Mr. BOYD: It would be very well if that opinion were published.

Mr. GRINDLEY: It was published.

NEW MEMBER OF COUNCIL.

The first business on the agenda paper was the election of a member of the Council and of the School Committee in the room of Mr. George L. McCormack, resigned.

The PRESIDENT moved that Mr. Henry Conyngham be elected.

Mr. BEGGS seconded the motion.

Mr. HODGSON said he was sure Mr. Conyngham would make a most excellent member of the Council; but the chemists and druggists were now large subscribers to the Society, and were they not entitled to a little more representation on the Council? There were very few of them on it.

The PRESIDENT: I gladly receive Mr. Hodgson's suggestion, which is quite in accordance with my own views. I made the suggestion myself to other members of the Council, but their reply was—and I think there is a good deal in it—that at the last general election a certain number of pharmaceutical chemists and a certain number of chemists and druggists were placed on the Council, and that it was desirable that that balance should be preserved in co-opting through the year. I hope that at the next October election some other members of the chemists and druggists' body will be placed on the Council.

Mr. HODGSON: I quite agree with that.

Mr. BOYD: Looking at the calendar I find that there are 391 pharmaceutical chemists and 553 registered druggists and chemists on the register. Those 553 gentlemen have two representatives, and, unfortunately, one of them lives in Belfast, and seldom attends.

Mr. WELLS: Mr. Gibson is a most regular attendant.

Mr. BOYD: I know that Mr. Gibson would attend every meeting if he could. In his absence the entire responsibility devolves on me, and I don't feel capable of fulfilling it. I was going to suggest that it would be a graceful act on the part of the Council to fill the present vacancy by an associate druggist.

Mr. WELLS: I was one of the persons whom the President spoke to, and I think it is our duty to maintain the balance referred to. Mr. Boyd is hardly doing justice to several members of the Council. There are gentlemen here who represent the druggists quite as well as any member of their own body. I do not think any of them will charge Mr. Hodgson with not representing them. I think that after a while the registered druggists throughout the country will admit that the pharmaceutical chemists have been their best friends. I understand that the druggists of Belfast are banding together, and saying that they must have protection; and I think that in a short time those gentlemen will find that they are best represented by the pharmaceutical chemists. Though I am looked on as a terrible character amongst them, a great many druggists voted for me at the last election, and I was very much surprised at it.

The motion for the election of Mr. Conyngham was then agreed to.

DR. DUFFEY ON THE EXAMINATIONS.

A letter from Sir William Kaye, clerk of the Irish Privy Council, transmitted the following letter from Dr. Duffey:—

30 Fitzwilliam Place, Dublin,
April 11, 1892.

SIR,—I have the honour to acknowledge the receipt of your communication of April 8, forwarding copies of a letter and its enclosure, received

from the Pharmaceutical Society, relating to portion of my report on the examinations held by the Society during the past year.

In the report I stated that "from the examiner's marks it would appear that there were eleven candidates who, according to the orders of the Privy Council of April 18, 1888, in force at the time, and regulating these examinations, were not entitled to pass" the Preliminary examination. The examiner says "there is no foundation for this assertion," and his suppositions would infer that my statements were made carelessly, and in ignorance of the regulations of the Society.

The regulation the examiner refers to is as that on page 87 of the Calendar of 1891, and on which he acted, is as follows:—"Arithmetic.—The first four rules, simple proportion, and decimals. To describe the weights and measures of the Pharmacopoeia, and of the metric system."

On the following page of the Calendar (page 88) are, however, the annexed rules:—"A percentage of 50 per cent. of the entire marks must be obtained in English and arithmetic, and 40 per cent. on the entire course, to entitle a candidate to pass."

"The marks will be allocated as follows:—Latin, 2; English, 30; arithmetic, 20; weights and measures, 10; elementary chemistry and botany, 10 each."

Further, in the report on which the examiner returns the result of the examination (*vide copy annexed*), there are two columns under the group "English," one for the marks given in composition, and the second for those in dictation. Next, there is a column for "arithmetic," and then a separate column for "weights and measures." If the intention was to include the latter marks with those given for "arithmetic," the column would presumably be arranged as for the English group, and separate marks would not be allocated for "arithmetic," as well as for "weights and measures." Therefore, although "weights and measures" is named under the heading "arithmetic," in the schedule of the subjects of examination, it is made as completely a separate subject in the allocation of marks as chemistry and botany are separate subjects. Hence, I am of opinion that the marks received in "weights and measures" should not be taken into account with those given for "English and arithmetic," in the calculation of the percentage of 50 per cent. of the entire marks that "must be obtained in 'English and arithmetic' to entitle a candidate to pass."

For these reasons, I submit, with all respect, that I had ample foundation for the assertion I made, and I am gratified to learn from the reply of the President of the Society to my report (a copy of which reply you were good enough to favour me with) that "the new regulations for this examination will meet my" objections and "enable the examiner to ascertain the attainments of a candidate more in accordance with my ideas."

I fail to comprehend fully the meaning of the examiner's statement that he "had no option but to pass" the three candidates I further particularly referred to in my report, whom he does not deny "were very deficient in knowledge of some of the subjects," and that "no discretion was given to him." If an examiner cannot exert his discretion in stopping a candidate absolutely ignorant in some of the subjects of the examination, because by his marks in other subjects he has obtained the required percentage entitling him to pass, the examination becomes a farce, and ceases to be the safeguard for the public the Legislature requires.

I have the honour to be, &c.,

Sir W. S. B. Kaye, Q.C., C.B.,
Clerk to H.M. Privy Council.

GEORGE F. DUFFEY, M.D.,
Visitor.

PHARMACEUTICAL SOCIETY OF IRELAND.

REPORT OF PRELIMINARY EXAMINATION.

Date _____ 189__.

G = Good; M = Middling; B = Bad.

Names	10 Latin 10		20 English 10		20	10	10	10	100
	Trans- lation	Pars- ing	Com- posi- tion	Dicta- tion	Arith- metic	Weights and Measrs.	Elem. Chem. and Physics	Elem. Botny.	Final Award

Examiner _____

The PRESIDENT: I fear there is a little friction between our examiner and Dr. Duffey, and that we had better let the matter drop. I think our new regulations will carry out Dr. Duffey's views.

CARRYING OUT THE ACTS.

The **PRESIDENT** moved, pursuant to notice:—

That the Law Committee be empowered to take such steps as they may think proper with a view to the prosecution of persons infringing the Pharmacy Acts, but must not incur expense exceeding 5*l.* without first reporting to the Council and getting their sanction.

He brought this motion forward to meet an objection made to their existing regulations by the Privy Council. No doubt it had never been the practice of the Law Committee to institute prosecutions or incur any expense at all for that purpose without first bringing the matter before the Council.

Mr. **WELLS** seconded the resolution. Under the regulations as they stood, the Law Committee had power to prosecute without consulting the Council, but they had never done so. They had always reported the cases to the Council in the first instance.

Mr. **HODGSON**: Some years ago a resolution was passed that no case was to be taken up by the Law Committee without the sanction of the Council.

The resolution was unanimously agreed to.

The **PRESIDENT** moved:—"That the Council ask the Attorney-General to receive a deputation with reference to the refusal of the police in some instances, to assist them in carrying out the Pharmacy Acts." Two or three district police inspectors throughout the country had told the Council that it was contrary to the rules of their force to ask people to commit a breach of the law, and that, therefore, they could not assist in trying to find out whether persons had violated the Pharmacy Acts or not.

Mr. **WELLS**: If that be police law, some of the police break it frequently.

Mr. **GRINDLEY**: On the other hand, there are a great number of police officers giving us every assistance in their power.

Mr. **WELLS**, in seconding the motion, said that in the Cork cases the police were written to twelve months ago, and replied that they were watching.

The motion passed unanimously.

THE EXAMINATIONS.

The **PRESIDENT** said it appeared from the reports of the examiners that at the late Preliminary examination in Dublin fifteen candidates presented themselves, of whom nine passed; that at the examination for the licence eleven presented, and nine passed; and that at the examination for pharmacists' assistants Mr. W. J. Galbraith, the only candidate that presented himself, passed.

ELECTIONS AND NOMINATIONS.

On the motion of Mr. Wells, seconded by the President, Mr. S. McKinney, L.P.S., Cookstown was elected a member of the Society; and on the motion of Mr. C. J. Johnston, L.P.S., seconded by Mr. Boyd, Mr. D. J. McGrath, L.P.S., Carlow, was elected a member.

On the motion of Mr. W. J. McNeight, A.D., seconded by Mr. W. F. Moore, A.D., Mr. Thomas Sheridan, Navan, was elected an associate druggist; and on the motion of Mr. Gibson, seconded by Mr. Montgomery, Miss Elizabeth Perrot, Belfast, and Mr. Frederick J. Shields, Belfast, were elected associate druggists.

On the motion of Mr. Wells, seconded by Mr. Grindley, the following gentlemen were nominated for membership of the Society:—Mr. David Boyd, L.P.S., Belfast; Mr. Alfred Lester, L.P.S., Cork; and Mr. John P. Allen, L.P.S., Dublin.

Some other business having been disposed of, the Council adjourned.

BISMUTH GALLATE.—According to the French patent this iodoform substitute is made by dissolving 11 kilog. of bismuth subnitrate in nitric acid, and adding to it a solution of 19 kilogs. of gallic acid in 40 litres of alcohol and 20 litres of water. The nitric acid of the mixture is barely neutralised with caustic alkali, an alkaline carbonate, or acetate of soda. By this means a basic precipitate of $\text{BiO}, \text{COO}, \text{C}_6\text{H}_3(\text{OH})_3$ of a yellowish colour is obtained, which is insoluble in water and free acids.

THE LABOUR COMMISSION.

CHEMICAL EVIDENCE.

ON Tuesday the section of the Commission presided over by Mr. Mundella took evidence with reference to the chemical trades. The other Commissioners present were, the Duke of Devonshire, Mr. Tunstall, Mr. Austin, Mr. Mawdsley, Mr. Tait, Mr. Livesey, and Mr. Tom Mann.

GEORGE MITCHELL SPEAKS FOR THE WORKMEN.

Mr. George Mitchell, in reply to the chairman, said there had been two attempts made among the labourers by the Scotch chemical industry of Glasgow, Irvine, and Rutherglen to form a union, but they had only succeeded very indifferently. The reason was that about 75 per cent. of the workers were of a floating character.

Asked if witness represented any Association, he replied that there was no Association, but he had been requested by a number of those employed in the industry to tender evidence. He was the Secretary to the Labour Literature Society of Glasgow, which disseminated literature bearing directly on labour problems. In Scotland there were from 1,000 to 1,400 men employed in the chemical industry, principally at five works. There were other works carrying on domestic manufactures purely of a local character. Disputes had hitherto been settled by the parties coming to a compromise.

Is there a pretty good understanding between employers and employed?—There is always a strained relation between them.

What do you propose to remedy?—I think there ought to be some legal restrictions on the hours of labour in that industry. There ought also to be a better system of inspection—that is, by the appointment of workmen-inspectors as well as inspectors who only know the trade from a purely scientific point of view. The inspectors are wholly drawn from men who are never outside a laboratory. When they make their inspection the dampers are put down, and consequently they find that the proportion of gases in the flue is generally below the limit.

HOURS OF LABOUR.

What have you to say as to the hours of labour?—I say that in no case ought they to exceed eight hours per day, and in many cases that time is too long. In making bleaching powder the men work under such conditions that it would be impossible for them to live if they worked the hours permitted by law.

But there is no limit by law?—No; there is a restriction at the present time, but they can, irrespective of the effects, work any hours they choose. Eight hours is too long in the chemical-works; for instance, at the manufacturing of vitriol and bleaching-powder it ought to be restricted to six hours. The employers ought to use every invention to make the works more sanitary, and then six hours might not be so injurious as three hours are now.

Are you in favour of eight hours per day as the maximum for all labour restricted by Act of Parliament, and that in some instances it ought to be six hours; and that Parliament should interfere to regulate the hours of labour, varying according to the stress and demand?—That is so.

Do you think Parliament should intervene and regulate the hours of labour in every department of every industry of the United Kingdom?—Speaking principally for the industry with which I am particularly acquainted, I see no reason why that should not be done.

If a man worked more than six hours in the vitriol department, would you inflict a penalty?—I would inflict a penalty on both the employer and employed.

What are the present hours of labour in the chemical industry of Scotland?—Eighty-four hours per week, working seven days a week.

Do they work on Sundays as well?—Yes, about 60 per cent. of them. They work seven days a week of twelve hours per day. The only employes exempted from that are the joiners, plumbers, and engineers. The men are paid every fortnight, and generally on the Saturday on which the pay occurs they are absent. Their exertions are so great that they generally get drunk when they get their pay, and they are unable to

go to work on the Sunday afternoon. In consequence of the physical exertion entailed by their own labour on the pay-days the men generally get drunk.

Surely you are libelling that class?—I am sorry that I have to make such a statement, but it is the fact, and it is too true. The foremen generally find men by some means or other to keep things going. They work eleven hours on the day-shift, beginning at six in the morning and finishing at five o'clock, and the night-shift works thirteen hours. Sometimes they have to work five or six hours before they can get anything to eat.

You say that the inspectors are men of a scientific character, but who have no practical knowledge of the conditions under which the workmen work?—That is so.

THE ATMOSPHERE OF THE WORKS.

What do you say as to the sanitary conditions?—In many of the works there is no ventilation at all, and there are leakages from the indifferent way in which the apparatus is put up, and the atmosphere is such that the men have to get out at the nearest opening into the open air. The gases are so strong that persons not accustomed to them will find their eyes watering a quarter of a mile away.

Is the employment generally injurious to health?—Yes. In the salt-cake department it generally takes the form of bronchitis. The percentage of deaths of men who keep to the chemical industry is terribly high. Three-quarters of the men employed go into other employments. As a general rule the industry is composed of young men. In Scotland about 85 per cent. of the workmen are Irishmen, and probably 5 per cent. Highlanders, the remainder being Englishmen.

How many years does a man work in the chemical industry?—I cannot give a statement, but men who are kept at it continuously for three years have to take an excursion to some of the homes for workers at the seaside.

Could the injurious effects be reduced by working shorter hours?—It would to a great extent prevent it, accompanied by better sanitary arrangements for the workers.

THE WORKMEN'S SHARE IN THE PROFITS.

Asked as to the modes of settling disputes, witness said that any of the proposals might do as a temporary arrangement. At present, he said, the workmen are in a defenceless position. Take the chemical industry—the men did the work for those who provided the capital.

Do you think that the capitalist and the scientific man (who does the work of the laboratory and does not take the actual part in the manual labour) live upon the labours of the workmen?—Yes.

Surely you require capitalists and engineers, and persons who conduct the work, and the merchant who sends the chemicals to all parts of the world and gives credit to foreigners. Would you allow these people to make any profit?—I want some other arrangement of society, whereby the work would be carried on for use and not for profit.

Does not the capitalist conduct his sales and manage his business?—The latest development is the Alkali Union, which is conducted against the worker. There is not much consideration for the health of the workers.

Your remedy for all the evils of society is State Socialism?—Yes.

Mr. Livesey: Does not the employer make some provision for relieving the men from continuous work?—No; the men arrange with the men in the opposite shift when they want a Sunday off.

Mr. Mawdsley: If you reduced the hours from twelve to eight would the men accept a corresponding reduction in pay?—The position of the men would not allow of any further reduction.

The men want an eight hours day, but they want twelve hours' pay?—Yes; the profits of the chemical industry fairly admit of that.

What are the profits?—They are difficult to get at, but there is one employer who is subscribing to the Evangelical tour of the Rev. John McNeil in the Western Highlands, whilst his own men are working for 14s. to 17s. per week.

The Chairman: You mean that he spends money to send missionaries to the Western Highlands?—Yes.

Do you object to that?—I object to it so long as the workmen are paid miserably for the time they have to work.

TRIPARTY

To Mr. Mawdsley: Witness could not say what amount of chemicals was exported.

Should not you ascertain the whole bearing of the question as regards the export and the home trade before you say what the men should be paid?—No; I hold that people's rights ought to be the first consideration, irrespective of home or foreign trade.

In reply to Mr. Tait, witness said that in Scotland the wages in the chemical trade ranged from 13s. 6d. to 17s. per week, while in England it was 17. per week, and this he attributed to Union organisation south of the Tweed. The average period that a man could work in the chemical-works was ten years. Arbitration was the best method of settling disputes.

EFFECTS OF THE GASES ON THE WORKERS.

In answer to Mr. Mann, witness said that the effect of working in the salt-cake department was that a man's teeth became black, and then they dropped out; and the men had to go about in rags as the dust destroyed the clothes. In the bleaching department the men always provided themselves with rum, which they took as an emetic. Something like sea-sickness overcame them. They wore a mizzle for the bleaching department, and inhaled through a flannel.

Asked to give an instance of any employer spending his money in support of an Evangelical tour in the Highlands, witness said it was the proprietor of the Shotmill Chemical-works who, according to the Evangelical Union Association, was guaranteeing the expenses of the tour of the Rev. John McNeil.

Do you want to prevent the system of persons investing and drawing interest out who contribute nothing to the conduct of the trade?—Yes, that is what I was meaning.

* * * The evidence from the Tyneside and Widnes districts will be given next week.

BURLINGTON HOUSE ECHOES.

BY-AND-BY it will be too hot for meeting in the Chemical Society's lecture theatre. The fellows will be glad to give way to Her Majesty's Board of Works if that body is to sanction the alterations which are contemplated for making the atmosphere of the theatre chemically pure. It is scarcely in accordance with the fitness of things that men of science should fret and fume in the close atmosphere of a large room in Piccadilly, when outside there is all the evidence of a coming summer. If the nation thought, when it planted here art, education and science, that the disciples of the various cults are very superior persons, whom time and weather do not affect, they were mistaken. Sons of Adam they all are to a man, and human nature will creep to the surface. It begins now to creep very quickly in the aforesaid theatre. It shows itself in brotherly love, as exemplified in allowing forty-one candidates for the fellowship to get through the ballot unscathed. Again, it is a dash for priority in discovery, and Professor Danstan and Mr. Dymond just manage to come in by a neck with an announcement regarding the

Existence of Two Isomeric Acetaldoximes.

This does not look a very likely discovery to come out of a Pharmaceutical Research Laboratory, but happening to get a specimen of acetaldoxime, $\text{CH}_3\text{CH}_2\text{NOH}$, in crystals, the authors set about to see what this meant. The crystals began to melt at 37°C ., but subsequently the correct melting-point was found to be 45°C . Now, it happens that the acetaldoxime of the text-books is a liquid which does not solidify in freezing, and the above facts appeared to point to the probability of the crystals being an isomeric form. The authors, therefore, heated the liquid oxime in a closed tube to 100°C ., and on cooling it to $10-20^\circ \text{C}$., they found that it set to a mass of hard tough crystals. These fused

at 48.5° C., boiled at 114.5° C., and gave the same proportions of molecular constituents on combustion. Indications were obtained of the existence of another isomer melting at 12° C. The crystals were long and tough, and to the toughness is due the fact that when the liquefied solid is allowed to cool in a capillary tube, it concretes in corkscrew fashion on the walls of the tube. It seems clear from these results that the solid is an isomeric form of the liquid acetaldoxime, and the discovery is of some importance in regard to stereochemical theories. Messrs. Dunstan and Dymond have not completed their work on the subject, and the reason why they made their statement now was that Professor Franchimont has published something of a similar nature.

Following this communication came one from Dr. Moody, one of Professor Armstrong's assistants, on the "Sulphonic Acids Derived from Anisols," in which he showed that when Kekule obtained para and ortho acids he must have used impure materials, for only a para sulphonate can be made from the pure. Then came a pleasing letter from

The Veteran Bunsen,

acknowledging the address recently presented to him by the Society. The old chemist was too feeble to write himself, but he had asked one of his colleagues to write to Sir Henry Roscoe, and the letter reflected the pleasure which he felt in looking back on the achievements of the half-century during which he has been connected with the Society. From this to

Trithionates.

On this there was a note from a Professor Spring, who more than twenty years ago published a paper upon the subject which was recently criticised by Mr. Colefax. The latter said that he could get no evidence of the formation of trithionate by the action of iodine upon a mixture of sulphite and thiosulphate of sodium with iodine. To that Professor Spring replies that he did not use the sodium but the potassium salts, which, strange to say, makes all the difference in the world. The German abstract of the paper, to which Mr. Colefax probably referred, mentioned the sodium salts. Professor Spring says it is best to use half the theoretical quantity of iodine. If the full quantity were used tetrathionate would be formed, but with half the quantity reduction of the tetra to the trithionate takes place owing to the reducing action of the sulphite.

The Physical Papers

were by Mr. J. Sakurai, of Tokio, the first being on "The Temperature of Steam from Boiling Salt Solutions." The discussion which followed this justified the acceptance of the note and that which followed it, there being great difference of opinion as to whether the steam is 100° C., or of the same temperature as the solution that it comes from. Mr. Sakurai's note detailed the arrangements to be made to ensure proper observation of the temperature, it being necessary to prevent the solution getting to the bulb of the thermometer and the steam from cooling. He conducted the steam through a heated jacket, and with calcium-chloride solution such results as the following were obtained:—

Observed temperatures	Boiling Solution	Steam	Jacket
	112.5° C.	111.7° C.	110.5° C.

Mr. Sakurai's next note was on a curious statement which has been made regarding solution of Glauber's salts. If the crystallised salt be heated so that the Na_2SO_4 dissolves in its own water of crystallisation, the temperature of the solution is 72° C., it has been stated, and that of the steam 100° C. This is erroneous, Mr. Sakurai finds, and is simply due to the fact that the steam comes from the edge of the heating vessel, while the thermometer is placed in the

centre, where the heat has not thoroughly penetrated. There was quite an animated discussion on these two papers. It was agreed, regarding the first, that the results could have been predicted by the laws governing the relations between the boiling-point and vapour-pressure; and Professor Crum Brown said the second reminded him of a phenomenon sometimes observed further north—viz., that the porridge could be burnt and yet one could stick one's finger into it without hurt.

Trade Notes.

WEED-KILLERS.—Messrs. W. Butcher & Son, Blackheath, referring to the comments we thought it right to make last week on their weed-killer, inform us that they have now adopted the appended label, which they attach permanently to every can and drum they send out:—

This liquid is a strong solution of arsenic, and must be guarded with the utmost care. The can must not be used for anything else but weed-killer.

They attach this, we understand, to the top of the can, as shown in the engraving. They do not consider that their preparation is a colourless one in the sense of the Arsenic Act, which is a point of law which we do not propose to



decide. Any way, they agree with us that the utmost caution should be used by the trade in supplying this article to the public.

We have also a note from the Acme Chemical Company (Limited), of Tunbridge, whose weed-killer has been before the trade for some time. They call our attention to the fact that they colour their "Acme" weed-killer blue, but not so as to stain the gravel when diluted. Also they paint the word "poison" on the drums, and drums and tins all have affixed to them a brass label bearing the following inscription:—"Acme Chemical Company (Limited), Tunbridge and Bolton. For poison only." They say they are doing all they possibly can to safeguard the public, and are confining the sale of the article to chemists, as they are bound to do.

CHEMISTS' ASSISTANTS' ASSOCIATION.

AT the annual general meeting of this Association, held on Thursday, May 5, the annual report of the Council was read by one of the honorary secretaries, Mr. J. C. Stead. It stated that the members now numbered 190, 101 having been enrolled during the present session. The patrons numbered 49, an increase of 5. The average attendance

had been 37. Twenty-eight papers and notes had been read at the business meetings of the session. The innovation of providing refreshments at all the meetings had proved a success, and the scheme had been economically carried out, the cost only slightly exceeding that of the refreshments provided at the musical and social evenings only of the preceding session. The only disappointment was that the Council were unable to award the silver medals and money prizes for essays and research, the work in none of the applications coming up to the standard which would justify the awards. The financial state of the Association's affairs was satisfactory.

The President (Mr. W. Lloyd Williams) moved the adoption of the report, which was seconded by Mr. Frank A. Rogers, and carried unanimously.

The Treasurer (Mr. C. J. Strother) then read the balance-sheet for the session 1891-92:—

Receipts.	£ s. d.	Expenditure.	£ s. d.
Balance in hand ..	5 10 7	Rent	26 0 0
Grant from publishing fund	20 0 0	Proceedings	33 16 6
Subscriptions—		Stationery and printing ..	9 16 5½
190 members ..	47 10 0	Printed postcards ..	5 0 7
49 patrons ..	25 12 6	Postal wrappers ..	1 0 3½
Balance from dinner ..	10 11 8	Stamps	6 19 8½
Publication of reports ..	7 17 9	Refreshments ..	10 15 9
Donations—		Conversations ..	13 9 11
Vice-president of the Pharmaceutical Society ..	1 1 0	Piano	0 11 6
Allen & Hanburys ..	1 1 0	Grant to publishing fund ..	20 0 0
Attfield, Professor ..	0 10 6	Sundries	0 6 1
Barclay & Co. ..	1 0 0	Balance in hand ..	37 3 8½
Baron, Harveys & Co. ..	1 1 0		
Burgoyne, Burdicks & Co. ..	1 0 0		
Burroughs, Wellcome & Co. ..	5 5 0		
Chemists' A. & M. W. Association ..	1 1 0		
Davy, Yates, & Routledge ..	1 1 0		
Evans, Leascher & Webb ..	1 1 0		
Heaven, Squire & Francis ..	1 1 0		
Hill & Son ..	1 1 0		
Hodgkinson, Prestons & King ..	1 1 0		
Hodgkinson, Treacher & Clarke ..	1 1 0		
Idris & Co. ..	1 1 0		
Ingram & Royle ..	1 1 0		
Maw, Son & Thompson ..	1 1 0		
Meggeson & Co. ..	1 1 0		
Morson & Son ..	1 1 0		
Newbery & Sons ..	1 1 0		
Portman Rooms Co. ..	1 0 0		
Sanger & Sons ..	1 1 0		
Savory & Moore ..	2 2 0		
Seabury & Johnson ..	1 1 0		
Silverlock ..	1 1 0		
Smith & Co. ..	1 1 0		
Stuart, J. E. ..	0 10 0		
Thompson, Walters, Hole & Co. ..	0 10 6		
Toogood, W. ..	1 1 0		
Wright, Layman & Unney ..	1 1 0		
Deut. of Piano ..	5 0 0		
Advertisements ..	4 14 6		
Sale of proceedings ..	0 2 6		
	£165 0 6		£165 0 6

This statement which had been audited by Messrs. Sage and Garnett, was adopted without dissent.

For the election of the Council for the coming session the scrutineers announced that eighty-four voting-papers had been received of which one was informal. The voting was as follows:—

Morris, W. A. ..	80	Robins, H. H. ..	63
Sead, J. C. ..	78	Parry, E. J. ..	57
Williams, W. L. ..	76	Secombe, C. W. ..	50
Ellwood, T. A. ..	76	Harrison, E. F. ..	47
Strother, C. J. ..	70	Robinson, H. A. ..	47
Walton, S. A. ..	68	Burnett, R. E. ..	45
Rogers, Frank A. ..	65	Sage, C. E. ..	43

The above form the Council. The following votes were also recorded:—

Morley, C. ..	42	Hobbs, A. E. ..	40
Shepherd, W. J. ..	40	Pearmain, T. H. ..	31
		Care, H. B., 12	

After votes of thanks to the scrutineers and to the auditors, the President read a valedictory address, after which a hearty vote of thanks was passed to him for his able fulfilment of the presidential office.

The Secretary has drawn up for us a table showing the progress of this Association from its foundation onwards. The record is of particular interest in showing that in all respects the prosperity of the Society is just now at the highest point yet reached.

Personalities.

A LARGE and elegant pharmacy is being fitted for Mr. Gough, chemist, Burnham, by Messrs. Vale Brothers, shop-fitters, &c., of Weston-super-Mare.

MR. JAMES KEEBLE, formerly with Mr. Gordelier, of Sittingbourne, Kent, has purchased the old-established business of Mr. Tame, chemist, Thame, Oxfordshire.

MR. S. M. BURROUGHS, who wrote us last from Tangier, turned up in Berlin last week, for the purpose (says the *Pharmaceutische Zeitung*) of closing a large contract for lanoline. He has this week returned to London, after seven months' travelling in France, Italy, Spain, North Africa, and Germany.

MESSRS. HOPKINSON & Co. announce the dissolution of the firm's partnership by mutual consent, Mr. Thomas Hopkinson retiring from the firm, which will still be carried on at Park Street, Nottingham, by Mr. W. T. Forbes, under the style of William Forbes & Co.

DR. DE VRIJ is in London for a few days, and favoured us with a call on Thursday. The gallant old quincologist is within twelve months of his 80th year, but is very hearty and cheerful. He took his diploma as a pharmacist at Dordrecht on June 6, 1832, very nearly sixty years since.

MR. E. J. BURROW, of South Cambray Lodge, Cheltenham, who was a chemist's assistant a few years ago, has for some time since established himself as an artist. He won a prize in one of our design competitions, and it was that circumstance, he tells us, which induced him to enter on his present career. He sends us some extremely well-executed etchings as specimens of his work.

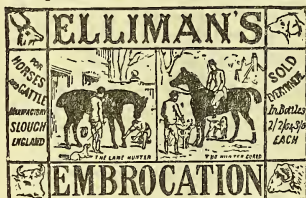
CHEMISTS' ASSISTANTS' ASSOCIATION STATISTICS.

	1877-78	1878-79	1879-80	1880-81	1881-82	1882-83	1883-84	1884-85	1885-86	1886-87	1887-88	1888-89	1889-90	1890-91	1891-92
Number of members	56	53	75	84	83	90	61	114	131	165	149	171	164	152	190
Members enrolled during session ..	—	—	21	31	23	55	12	72	82	72	57	66	47	46	101
Patrons ..	—	—	—	—	7	7	17	30	27	34	35	45	44	44	49
Balance at end of session ..	—	18 11	10 5	31 5 3	—	—	—	25	24 1 0½	31 2 3½	31 7 0½	29 3 4	31 3 1	8 10 7	37 3 8½

Registered **"SANITAS"** Trade Mark
DISINFECTANTS
AND
APPLIANCES.

PRICE LIST AND PAMPHLET ON APPLICATION.
THE SANITAS CO., LIM., BETHNAL GREEN, LONDON, E.

SHOW CARDS, 24x17 or 17x12,
Free to any address in the United Kingdom.



See first page, facing inside of front of cover, of first issue of this month, for latest particulars.

THE NEW EMBROCATIVE BALM FOR HUMAN USE.

DAY'S OIL OF THE NIGHT

1/1 and 2/9 per bottle.

WRITE FOR TERMS FRAMED TO PREVENT CUTTING.
DAY & SONS. CREWE. CHESHIRE.

*In Strength & Ingredients
Identical with B.P.
Miscible
Fluid
Extract of Cassia
Alkalies
not used
in production
Ebmey's
Wright, Hayman & Munro, Southwark, London*

MUMFORD'S
(FARRINGTON ROAD, LONDON E.C.)
THE BEST THAT CAN BE PRODUCED.

PURE CRUSHED LINSEED	(18/)	1 cwt. carriage paid; or 7, 14 & 28 lbs. free on rail Lond.
PURE STARCH POWDER	(26/)	1 cwt. carriage paid; or 7, 14 & 28 lbs. free on rail Lond.
PURE FULLER'S EARTH (Light Colour)	(16/)	1 cwt. carriage paid; or 7, 14 & 28 lbs. free on rail Lond.
PURE FULLER'S EARTH	(14/)	1 cwt. carriage paid; or 7, 14 & 28 lbs. free on rail Lond.

CARRIAGE PAID

To Railway Stations within the radius of 20 miles from London, and up to 2s. to Stations beyond, on 112 lbs. and upwards of above articles.

**LONDON AND LANCASHIRE
FIRE INSURANCE COMPANY.**

Head Offices { 45 DALE STREET, LIVERPOOL.
74 KING WILLIAM STREET, LONDON.
West-end Branch: 26 PAUL MALL, S.W.

Annual Income ... **£801,000.**
Funds in Hand ... **£1,026,000.**

Premiums Moderate. Losses settled with promptitude and liberality.

Applications for Agencies specially invited from Chemists and Druggists in both Town and Country Districts.

**RENCH ESSENCES
ESSENTIAL OILS
OTTO MUSK.**
Warrick Brothers
Old Swan Lane London E.C.

CHASSAING & CO'S PEPSIN, PEPTONE, PANCREATINE
6 Avenue Victoria, PARIS.
Sole Agents for the United Kingdom, France, Belgium, 17 Philip Lane, London, E.C.
(See Advert., Fourth No. of this Journal each month.)

**SCHWEPPE'S
GOLD MEDAL TABLE
WATERS**

AS SUPPLIED TO THE QUEEN.
In Bottles and Patent Syphons.

51 BERNERS STREET, LONDON, W.

Fletcher's
Concentrated Liquors

"A DISTINCT ADVANCE IN PHARMACY."—Medical Press and Circular.

Editorial Comments.

POISONOUS PATENT MEDICINES.

It has been decided by those most closely concerned not to appeal from the Magistrate's decision in the chlorodyne case. The proprietor of that preparation will in future attach a

label to every bottle which will indicate its character in the manner required by the Pharmacy Act as it was interpreted last week by the Bow Street Magistrate. It would have been in some respects more satisfactory if the questions involved could have been finally disposed of by a trial in the High Court, but we cannot be surprised that Mr. Davenport should have been disinclined to undertake at his own cost to obtain judicial pronouncements for the gratification of adversaries whose interests are, to say the least, not coincident with his.

There is, of course, no assurance that all the makers of proprietary medicines containing poisons will accept the decision in the chlorodyne case as binding on them, but there is reason to believe that the Association which has carried the matter to the present point will not rest content with a mere forensic victory. Manufacturers not satisfied with Mr. Lushington's interpretation of the law are likely to have plenty of opportunity of challenging it. It would be grossly unfair to enforce the Act in the case of one proprietary medicine only.

Then comes the more delicate question, in which chemists are particularly interested, of the vendor. Mr. Lushington's judgment clearly covered this part of the question. He held that the term "patent medicines" in the 16th section of the Pharmacy Act applies only to medicines which have actually been patented, and therefore the exemption from the effects of the first fifteen sections of the Act in regard to "the making and dealing in patent medicines" does not authorise unregistered persons to sell poisons merely because they are sealed up with the Government stamp. This view was first definitely expressed in Mr. Alpe's "Handy-book of Medicine-stamp Duty," and has since been endorsed by every legal authority who has publicly expressed himself on the subject—Mr. Poland, of course, excepted. We do not expect it will be overthrown if it should ever be argued before the judges of the High Court, but it must be admitted that the patent-medicine people generally have some ground for complaint at having the ground cut from under them to the extent that this is done by the adoption of this construction of the section. When the Pharmacy Act was under consideration in Parliament their opposition, which would have been formidable, was bought off by the insertion of the exemption quoted. There can be no doubt, we should suppose, that the promoters of the Bill and the makers of the so-called patent medicines meant by the clause just such preparations as chlorodyne. That they meant only medicines which were or had been actually patented is hardly conceivable, for it is doubtful whether there were any such of a poisonous character in existence.

It may be said that if the patent-medicine people were content with a vague definition in 1868 they must take the consequences of their carelessness in 1892. This they have to do, but the sense of injustice remains. And it is difficult to say how the medicines intended to be exempted could have been defined unless they had been specifically scheduled.

But, whatever might have been intended in 1868, it is hardly doubtful that the desire now on the part of those in authority is very distinct in regard to the limitation of the sale of poisons in any and every form. If poisonous proprietary medicines were exempt from the operation of the Pharmacy Act, there is an influential section of people who would demand an amending Act to include them. This is the circumstance which will justify the Pharmaceutical Society in taking action against unqualified vendors. And we understand that even if the Society were anxious not to exercise the powers entrusted to them, they would soon be called upon to move in the matter.

It seems certain, therefore, that makers of proprietary medicinal articles containing any form of scheduled poison must reckon on the condition that their specialities will have to be supplied to the public through the hands of registered chemists alone. It may be added that, thanks to the steadfast refusal of the Pharmaceutical Council to try to get their Act amended in relation to limited companies, these formidable rivals may also keep open shop for the sale of these goods. It must be remembered that the "seller" of such goods is required to be qualified, and chemists who put up their own specialities must not forget that the law applies to these as well as to the more widely known articles. We may remark that it is still a doubtful point whether the name of the poisonous ingredient need be placed on the label as well as the word "poison," but the name and address of the seller (that is, of the person who keeps the open shop) must be on the packet, and "the name of the article." It is quite reasonable to assume that "chlorodyne" (to take the most handy example) is the name of the article in that case, and that in naming the poisonous ingredients on his labels, Mr. Davenport is going a little beyond what the law actually requires.

If chemists are to have the monopoly of the retail trade in poisonous patent medicines, they should show, we think, special consideration towards the makers of these. They ought at least to put no difficulties in the way of persons wishing to purchase them, nor ought they to expect more than a reasonable profit on the sale of them. These are principles of fair play to which our allies, as the makers of these products will now have to be, are reasonably entitled.

RECENT RESEARCH ON SARSAPARILLA.

FOR the last three hundred years sarsaparilla has been employed in Europe as a remedy against syphilis, and although all record of the circumstances under which the drug acquired its reputation is lost, it still retains an important position in pharmacy in spite of the opinion of some representatives of medical science that sarsaparilla should be relegated to the useless lumber of the apothecary. In Russia sarsaparilla has become a popular remedy notwithstanding the opposition of physicians, whilst in France enormous quantities are used at times, and the consumption is also considerable in England, Italy and Germany.

The results of a chemical and physiological examination of the commercial drug recently undertaken in the Dorpat laboratory under Professor Kobert's guidance by W. v. Schulz, must possess interest for pharmacists as well as for medical men and pharmacologists, especially as sarsaparilla is again taking a prominent rank in certain quarters as a syphilitic remedy. Hitherto little has been accurately known with respect to the active constituent of the drug, and the literature relating to physiological experiments with it is exceedingly scanty. That the active principle is of a glucosidal nature and nearly related to or even homologous with saponin was first pointed out by Flüchiger, who gave the substance isolated by him the name of parillin; whilst about sixteen years ago a pharmacologically active saponin was prepared from sarsaparilla in Dragendorff's laboratory which differed in many respects from the saponaceous substances known at that time. Numerous other more or less definite substances of an allied nature have been isolated and described by various investigators at different times, but apart from the differences in results that might arise from the examination of products from different sources, there

can be little doubt that the method of preparation adopted would considerably affect the physical and even the chemical characters of compounds so unstable as are many of the glucosides, which frequently appear to split off successive molecules of sugar from the mother-substances, and yield new compounds that are themselves glucosides and liable to be confused with the original substances present in the plant.

In the present investigation Professor Kobert has followed a wise policy in directing that the products obtained by other experiments, such as the insoluble parillin of Fliksiger and the saponin or smilacin of Dragendorff, should be examined simultaneously with the crystalline glucoside sarsasaponin, isolated and described in the present memoir by W. v. Schulz, with the view of attempting to establish the relationship existing between them. Experiment shows that although all these compounds are different, they are members of a homologous series to which Professor Kobert in 1890 assigned the general formula $C_nH_{2n-3}O_{10}$. The lowest member is smilacin, or sarsaparillaponin, as it is proposed to term it, which possesses the same formula, $C_{25}H_{48}O_{10}$, that corresponds to the values found for digitonin, cyclamin, and quillaic acid. The sarsasaponin has the formula $C_{31}H_{56}O_{10}$, parillin $C_{35}H_{64}O_{10}$, whilst it was also observed that the melanthin of Henry Greerish is apparently also a higher member of the same series with the formula $C_{39}H_{70}O_{10}$. Hydrolytic experiments showed that not only could these substances be split up into sugar and non-saccharine bodies like parigenin and sarsasapogenin, but that the sarsaparilla glucosides contain several sugar radicles, which can be split off successively by treatment with dilute sulphuric acid, the sugars obtained being ordinary dextrose and galactose.

These three glucosidal substances obtained from sarsaparilla belong to the pharmacological group of saptoxin in their action, and after internal administration to cats no absorption was observed, but only local action, such as nausea, increased flow of saliva, and diarrhoea, although rabbits appeared to bear the administration *per os* without any such local disturbances. It would, therefore, appear that these glucosides are not readily absorbed into the human system so long as the intestines are in a normal and healthy condition, but that their action depends upon the production of nausea and motions of the bowels. Subcutaneous injections of any of the three substances caused large purulent abscesses, sarsasaponin apparently possessing the most intense action when introduced into the blood, and only requiring 50 milligrammes per kilo. of body-weight as a lethal dose for cats and dogs. Parillin is next in activity, with 120-150 milligrammes for the lethal dose, whilst sarsaparillaponin was found to require a dose of 165-230 milligrammes. The three saponins act as cardiac muscle and nerve poisons in intravenous injections, and cause hæmoglobinuria even in small doses.

The results of this investigation are condensed into a pamphlet of about one hundred pages. Among the other conclusions suggested, it appears that the Vera Cruz and Mexican sarsaparilla are the most useful varieties of the drug in respect of medicinal value.

PARAFFINATED MOGADORE WAX.

AMONG the many parts of the world which supply us with beeswax, Mogadore, in Morocco, has always possessed an unenviable notoriety for the aptitude of its merchants in the adulteration of this important article of commerce. Goat-fat has usually been the Mogadorian's favoured adulterant.

Sophistication of this sort was really not a very obnoxious matter, for everybody who had to do with Mogadore wax knew the trick, and the manufacturers who employed the article found no difficulty in separating the wax from the grease. But, in the course of last year, the ingenious Mogadore merchants discovered a new adulterant, with which for a few weeks they deceived, and for many weeks puzzled, their customers. One of the principal buyers of Mogadore wax in London called our attention to the fraud, and begged us to test a sample of the adulterated stuff, for which his customers had no use, because they did not know how to separate the adulterant from the genuine material. We ascertained that the wax contained 65 per cent. of paraffin, and duly made the fact known. Shortly afterwards this particular form of sophistication ceased, while the paraffinated parcels yet on hand became practically unsaleable. At the time the correctness of our analysis was questioned by more than one firm interested in the sale of the wax, and it was confidently asserted that paraffin wax as an adulterant was impossible in Mogadore, because it would be far too costly to import for that special purpose. We had almost lost sight of the matter, and would not have referred to it again now, but for the recent publication of the annual report of our Consul in Mogadore upon the trade of his district. In that document there occurs a paragraph proclaiming, with much self congratulation, how British trade is spreading, and how British commodities are increasingly appreciated in the empire of the Moors. That, after the usual jeremiads about German competition from all other parts of the world, was indeed pleasant intelligence, and with growing interest we read on. "Candles," so we were told—"cheap paraffin candles," were a large article of import into Mogadore in 1891, and it was in this particular business that the growth of British commerce, "so gratifying to our patriotism," found its chief expression. Formerly France had almost a monopoly in supplying Mogadore with candles. In 1893, 5857. worth of this useful illuminant (and adulterant) came from France, and only 437. worth from Great Britain. In 1891, 1,0637. worth came from France, 1,0007. worth from Germany, and 7,4777. worth from England. And how is this remarkable increase in the candle consumption accounted for? Is it evidence of the growing enlightenment of Morocco? Has "Light, more light!" become the national motto? Alas! no. "This very large increase," continues the Consul (so gratifying, be it noted, to British patriotism), "must partly be accounted for, it is to be feared, by the fact that for a time candles were largely used to adulterate native beeswax for export, and were imported for that purpose—a short-sighted trickery which soon defeated itself by spoiling the market for such wax, through the immense fall in price on certain European markets immediately consequent on the discovery of the admixture." Meanwhile the exports of "beeswax" from Mogadore in 1891 were valued at 14,7607., nearly double the value of the 1890 exports. In 1891, 9,2837. worth of the wax went to England, 2,7367. worth to France, and 2,3047. worth to Germany. The latter country, by the way, has commenced, during the last few years, to import several kinds of drugs direct from Mogadore, apparently with fair success.

This—temporarily successful—attempt to import cheap paraffin candles from England into Africa, and ship them back again to London in the proportion of two of paraffin to one of beeswax to deceive English buyers, paying freight and expenses both journeys, may form a not uninteresting contribution to the history of "Modern Business Methods."

Drinks predicts a good season for the aerated-water trade. "The prospects are really better than they have been for some time."

COMMENTARY.

AN EASTERN QUACK.—A Rangoon correspondent sends us an advertisement cut from a paper published in that city, in which "the famous Hakim Najat Ali, Shah Kadir, of Bagdad," with offices at Calcutta and Bombay, announces his ability to cure asthma, bronchitis, paralysis, and a long string of other diseases, "according to constitution." The Hakim says he "holds first-class registered certificates considered by doctors as incurable." This looks bad for the certificates. The advertisement announces that "a telegram has just been received from His Highness the Makore Sahib of Morvi, M.E.W., who has consented for a fortnight to pay him 250r. daily for his visit, and after that 250r. per day." On such an offer His Highness can hardly expect to get cured in less than three weeks.

AN AMOROUS APOTHEKER'S APPEAL.—Some German pharmacists may be content to come to this country on the chance of ploddingly grubbing their way to wealth along the miry track of competition, but a more expeditious and less exacting device presented itself to the mind of one of the fraternity, who recently inserted in a Berlin journal, the *Vossische Zeitung*, an advertisement for an English companion who would share his prospects by attaching herself to him by the silken cords of matrimony, while contributing simultaneously a sufficiency of British gold to admit of the acquisition of a suitable establishment. This is how the pharmacist expressed his modest desires:—

MARRIAGE!

Wanted, acquaintance with a well-educated, wealthy Lady, about 30 years of age, by an Apothecary of officer's rank, worth 102,000m., going to buy a big pharmacie in Berlin or a similar city. Secret by parole of honour. Please to be made earnest applications sub Y. S. 481, by this paper. Agents declined.

Is it possible to think that such a touching appeal may have passed unheeded?

ASH OF GREEN EXTRACTS.—It is a somewhat remarkable fact about the green medicinal extracts that they contain an amount of mineral matter which would scarcely be credited by those who have not made any determinations on the point. Dr. W. C. Traub, writing to the *Schweiz. Wochenschr. für Chemie und Phar.* gives figures for belladonna, hemlock, and henbane, which we may quote, the extracts being spirituous—i.e., prepared from the fresh leaves with a spirituous menstruum. Three samples of belladonna extract yielded 18.34, 19.53, and 20.65 per cent. of ash, in which there was from 65 to 78 per cent. of K_2CO_3 . Two samples of henbane extract yielded 19.4 and 21.23 per cent. of ash, the K_2CO_3 in this case being 54 and 56 per cent.; and while the ash of hemlock extract was 18.8 per cent., the percentage of K_2CO_3 was only 39. All the extracts, we may say, contained at least 20 per cent. of moisture. Obviously one can judge with some approximation from the potassium content of the ash alone what the source of the extract is. Aconite-leaf extract contains a relatively low amount of mineral matter.

AN HISTORIC BERLIN PHARMACY.—The green-painted little house on the Chaussee-Strasse in Berlin, known as Schering's Grüne Apotheke, which for more than sixty years has been the home of one of the best-known pharmacies in Europe, is now in the process of demolition, only, however, to rise again from its ruins in a garb more in conformity with modern ideas and the importance of the business. The house was built in 1830 upon a plot which had previously been a market garden, and opened as a pharmacy. In 1851 it passed into the hands of the late Mr. Ernst Schering, an accomplished pharmacist and far-seeing

man of business, though then still an obscure individual upon the threshold of his career. Mr. Schering painted the edifice green all over, emblematical of his hopes of business success, and green it has been ever since. In the modest laboratory on the Chaussee-Strasse the foundation of the world-reowned Schering's Chemische Fabrik was laid, and here in 1863 the apotheker who founded the house prepared for the first time extract of malt, and a few years later pepsine essence, now domestic remedies known all over the world, but of the coming importance of which he had probably not the remotest idea. The growing importance of the manufacturing department soon necessitated its severance from the pharmacy. The latter afterwards passed into the hands of one of Mr. Ernst Schering's sons, who is still, we believe, the proprietor, while another son acquired a leading interest in the factory.

"TOO PREVIOUS."—The Royal Society have just published a paper by Mr. J. J. Waterston on "The Physics of Media composed of Free and Perfectly Elastic Molecules in a State of Motion," which was communicated more than forty years ago, and which was then declared by one of the Society's experts to be "nothing but nonsense, naïf, even, for reading before the Society." Professor McLeod says that the chemical views advanced in this paper, "shadow forth many of the ideas of modern chemistry, and the paper might have been the means of hastening their reception by chemists." Waterston distinctly expressed the opinion that "a molecule in motion, without any force to restrain or qualify it, is in every respect to be considered as a free projectile. Allow such free projectiles to be endowed with perfect elasticity, and likewise extend the same property to the elementary parts of all bodies that they strike against, and we immediately introduce the principle of the conservation of *vis viva* to regulate the general effects of their fortuitous encounters." All this is not unlike our modern kinetic theory of gases, and the paper as a whole is so interesting and important that Lord Rayleigh has secured its publication in the *Philosophical Transactions*.

PHOTOGRAPHIC NOTES.

PHOTOGRAPHY IN THE COLOURS OF NATURE.

ON Tuesday afternoon, Mr. Frederick E. Ives, of Philadelphia, lectured on this subject to a select audience at the Royal Institution, this being the first of a half-guinea course of two lectures. So far as his own invention is concerned, Mr. Ives made no pretension that it is an original discovery, for in an historical sketch he did full credit to Mr. Collin, of H.M. Patent Office, who more than a quarter of a century ago conceived the idea of getting three negatives of an object through primary coloured glasses, and superimposing these, obtaining a print from the composite plate. This idea could not be carried out in practice owing to the want of plates sufficiently sensitised, but Ducos Du-Hauron, of Paris, in 1868 made some advance upon Collin's method, and so did Cros and Poirée. Next, Dr. Vogel conceived the idea of introducing colour-sensitisers in the shape of dyes of appropriate colour, and from this point considerable advance has been made. All these processes, as well as Dr. Albert's chromo-collotype process and Dr. Stolze's suggestions, were criticised by Mr. Ives, in the light of the Young-Helmholtz theory of colour-vision and the relative power of the different spectrum rays.

The practical outcome of this argument was to show that the use of red, yellow, and blue media, pure and simple, would not suffice to give a perfect picture. That, in a large measure, is where previous experimenters have failed. With the Young-Helmholtz-Maxwell spectrum wave-lines as his guide Mr. Ives uses colour media which are not pure red, yellow, or blue, as the case may be, although to the ordinary eye they look so; but these media are mixtures of definite

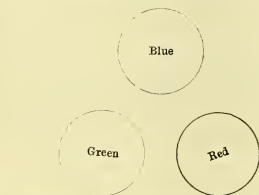
proportions of colour, the proportions being obtained from a study of the spectrum colours and practical experiment. Thus the red is really a mixture or blend of the spectrum colours from the extreme red to the centre of the orange. This portion is what appears to be all red when viewed by a person with mono chromatic vision (red). The yellow, or properly speaking green, medium is a blend of the colours in proper proportion from the orange to the bright green of the spectrum, and the blue takes up the running from that point to the extreme violet.

In the next lecture, Mr. Ives proposes to speak in detail of the cameras, lanterns, plates, &c., by which the colour-photographs are taken, but on Tuesday he referred briefly to these and showed a picture on the screen, as well as a number of photos and his heliochromoscope.

Meanwhile, therefore, we need only say that the camera is very like an ordinary one, but instead of the dry plates going at the back of the body, they are placed at the top, in the place indicated by A in the following diagram. There is only one lens, but by means of mirrors and other optical



arrangements three images are thrown upon the plate, and each image passes through a coloured film, three of which are arranged as follows:—



The consequence is that a greater or less degree of density is obtained on the negative according to the nature of the colour. Obviously red colours have the deepest shadows on the blue image, and so on. Development, &c., is performed in the ordinary way. Positives taken from the negatives look like ordinary photographs, but are of course transparent, and the three images show the contrast of colour only in greater and less density at particular parts.

Before such a picture can be seen in nature's colours, it must be placed either in a triple lantern or the "heliochromoscope," which is Mr. Ives's invention. In the lantern the lenses are arranged as above, with violet, green, and red films in front of the lens, and the light-rays so directed that they meet on the screen to form one circle of white light with a coloured halo round it which shows its origin. As soon as a triple picture is put in, the colour and light and shade come out in all their natural beauty. The picture thrown upon the screen was a reproduction of a small chromograph standing in front of a background of blue, red, yellow, green, and other coloured stripes. This object was in front of the audience, and it was impossible to distinguish between it and the screen picture.

After the lecture the "heliochromoscope" was shown. This looks not unlike the camera, and the optical arrangements inside it blend the triple picture to make one image, the effect in the case of a pot of scarlet geraniums being decidedly charming. We presume that the "heliochromoscope" is to take the place of the old stereoscope. This is part of the invention which is protected by patent, and although Mr. Ives has not yet got it to a state of perfection, doubtless nature-coloured pictures will ere long be familiar and in demand.

LANCASTER'S NEW CATALOGUE.

We have received a copy of the 1892 catalogue issued by Messrs. J. Lancaster & Son, of Birmingham. It is artistically printed in brown ink with pale blue margin of quaint design. It is a complete price-list of all the cameras and photographic requisites required by amateurs, the information regarding Lancaster's well-known sets being specially valuable to retailers. We notice, by the way, that over 30,000 of the "Instantograph" cameras have been sold. The firm now make these and other cameras with aluminium mountings.

"HOW TO BUY."

Those who are on the outlook for bargains should see the "job-list" just issued by Mr. Jonathan Fallowfield, 146 Charing Cross Road, W. The whole range of photography appears to be included in the cheap lots.

THE "RADIAL" CAMERA.

Messrs. Marion & Co. are now making their popular "Radial" hand-camera in lantern and half-plate sizes, as well as quarter-plate. It is obviously of immense convenience to have a high-class instrument like this in lantern size, and the "Radial" has the further advantage of being very light.

DEVELOPING-DISH, ROCKER, AND SCREEN.

This apparatus, one of the many patented novelties of Mr. C. C. Vevers, 12 Market Street, Leeds, serves three purposes—i.e., developing-dish, a simple rocker, and a screen to keep off light, and so lessen the chance of fogging the plate. The parts are all detachable, and no dark-room should be without them.

BANKRUPTCY REPORT.

Re RICHARD VERITY, 64A, Seymour Street, Portman Square, W., Chemist and Druggist.

THIS debtor has presented his petition at the London Bankruptcy Court, and, on the application of Mr. C. H. Staniland, solicitor to the proceedings, the usual receiving order has been made. The debtor states that he formerly carried on business at 523 King's Road, Chelsea, but left there last December, and has since traded at Seymour Street. He now pays 120*l.* rent per annum, but is one quarter in arrear. The fittings belong to the landlord, and the Sheriff of London having been put in possession at the suit of Natale & Co., an interpleader is pending in respect of the fittings. The stock is valued at 20*l.* to 30*l.*, if disposed of by a forced sale. The business being a cash one, there are no hook debts, and the debtor further states he has no furniture or other assets.

DEED OF ARRANGEMENT.

The following deed of arrangement with creditors has been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1867. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision, in the Act making any of these arrangements binding upon dissenting creditors.

Kirkness, Robert, 11 and 68 Main Street, Cadroxton, chemist. Trustee, Charles E. Dovey (Clarke & Dovey), Queen Street, Cardiff, accountants. Dated May 7; filed May 10. Unsecured liabilities, 243*l.* 18*s.* 5*d.* estimated net assets, 140*l.* The following are scheduled as creditors:—

	£	s.	d.
Christie, Malcolm & Co., Newcastle-on-Tyne	10	16	3
Davis, Richard, Cardiff	11	5	0
Hippell, W. J., Aberdare	35	0	0
Ismay, John & Sons, Newcastle	79	18	2
Simcock, T. W., Leeds	23	11	4
South Wales Union Bank, Cadroxton	43	14	5

And ten under 10*l.*

MARRIAGES.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

HALL—BROWNLEE.—At Darnawa Cottage, Sir Lowry Street, Cape Town, on April 14, by the Rev. Vine Hall, John Hall, chemist, Claremont, to Alexandrina Wyness, eldest daughter of James Brownlee, of Aberdeen, Scotland.

KEEBLE—RUGG.—On April 5, at the parish church, Sittingbourne, by the Rev. S. Wilkinson, Mr. James Purcell Edward Keeble, chemist and druggist, of Woolwich, to Elizabeth, youngest daughter of the late Mr. Charles Octavius Rugg, of Meopham, Kent.

DEATHS.

BOWERS.—Mr. Robert Bowers, the father of Messrs. Bowers Brothers, the chemists' printers, of Blackfriars Road, died a few days ago, at the age of 74.

CARR.—On May 1, at Wharf Street, Leicester, Mr. William Carr, pharmaceutical chemist. Aged 69.

HILLS.—On May 3, Mr. Francis Clarke Hills, the head of the firm of F. C. Hills & Co., manufacturers of ammonia, sulphuric acid, and other chemicals, died at his residence, Redleaf, Penshurst, Kent, at the age of 84.

HOFMANN.—Professor August Wilhelm Hofmann, one of the greatest chemists which Germany has produced, died at his residence in Berlin on May 5 of paralysis of the lungs. The deceased scientist was born at Giessen in Prussia on April 8, 1818, and after first studying modern languages devoted himself to chemistry, under Liebig, at the University of his native town. After graduating he acted as Liebig's assistant until 1845, and during that time began to devote special attention to that investigation of the coal-tar bases and the synthesis of indigo which afterwards rendered him famous. From 1845 to 1848 Hofmann acted as private teacher in Bonn, whence he migrated to London, where he had been appointed superintendent at the Royal College of Chemistry in Oxford Street, now the chemical department of the School of Mines. Among those who attended Hofmann's lectures in Germany were Prince William of Prussia, afterwards William I., German Emperor, and his son, the late Emperor Frederick. Until close upon his death the old Emperor William was kept constantly informed of the progress of chemical science by Professor Hofmann, and one of the first acts of the late Emperor Frederick upon ascending the throne was to confer a patent of nobility upon his former teacher, with whom he was upon terms of close personal friendship. Professor Hofmann remained in London until 1863, and became as well known and esteemed in England as he had been in Germany. Many prominent living British chemists studied under him, and with all his pupils the professor was



equally popular. In 1851 he was made an F.R.S., and in 1854 a royal medal was conferred upon him for his "Memoirs on the Molecular Constitution of the Organic Bases." In 1863 the Prussian Government asked Hofmann to undertake the reorganisation of the chemical laboratory at Bonn University, and in 1863 he was appointed Professor of Chemistry in Berlin, a position which he has held ever since; indeed, his last lecture was given on the day before his death. Professor Hofmann was a great friend of Italy; his vacations were mostly spent in that country, and he was on terms of close friendship with many prominent Italian statesmen, authors, and scientists. Professor Hofmann's doctor-jubilee was celebrated with great pomp last year in German University and chemical industrial circles. He may be said to have been the father of the modern coal-tar industry, the development of which dates from his discovery of the composition of aniline red. His studies were principally in the domain of organic bases, and he was a

voluminous writer upon this subject; one of the most beautiful aniline dyes—"Hofmann-violet"—has been called after him. In 1868 Hofmann founded the German Chemical Society, of which he was the first president.

HUGHES.—On May 7, at Llangefni, Anglesey, suddenly, from apoplexy, Mr. Robert Hughes, chemist and druggist. The deceased gentleman was highly respected, being popularly known in the district as "the Mayor of Llangefni."

JONES.—On May 5, Mr. William Withers Jones, pharmaceutical chemist, Southwell Street, Kingsdown. Aged 61. Mr. Jones was for many years with the firm of Messrs. Webb, Fardon & Co., of Castle Street, and then entered into business on his own account; one establishment being in the Hotwell Road and another in Southwell Street, Kingsdown, where he had been for twenty-three years. He was a prominent Wesleyan, and was universally liked and respected.

MAKINS.—The death is reported at the age of 77, of Mr. George Hogarth Makins, M.R.C.S., L.S.A., F.I.C., F.C.S., &c., the Master of the Society of Apothecaries. Early in life Mr. Makins was a manufacturer of pure chemicals at Surbiton, and he afterwards secured a high reputation as a metallurgist, and was assayer to the Bank of England for ten years up to 1863, also lecturing on metallurgy at the Dental Hospital, Leicester Square, up to 1860, in which year he was elected to the Court of Assistants of the Society of Apothecaries. He was elected Master of the Society three years ago.

MCCULLOCH.—On April 23, Charles McCulloch, chemist and druggist, New Cross. Aged 75.

MIDDLEY.—On April 23, J. E. Midgley, chemist and druggist, Liverpool. Aged 49.

PURDUE.—On May 2, Thomas Purdue, chemist and druggist, Witney. Aged 82 years. Mr. Purdue, who was one of the founders of the Pharmaceutical Society, owed his connection with pharmacy to an early taste for the sciences, especially chemistry and mineralogy, in both of which he as a young man acquired proficiency. He entered business at Bexley Heath, in Kent, more than fifty years ago, his diploma from the Society being dated June 1, 1841. After eleven years' residence at Bexley Heath, Mr. Purdue settled in business at Witney, in the year 1858. At the time the Palmer strychnine case came on for investigation, the



deceased pharmacist performed some experiments on frogs to ascertain the effects produced by strychnine. Whilst these experiments were being conducted one of the frogs jumped into the strychnine-bath and became tetanic and rigid. It was taken out of the bath and by means of the vapour of chloroform restored to its usual condition. The result was made known and was much appreciated by the medical profession at the time—no such discovery having been heard of previously.

Legal Reports.

DISPUTE AS TO A CHEMIST'S BUSINESS.

IN the Chancery Division of the High Court on Friday before Mr. Justice Sirlin, counsel were heard on two motions relating to the interests of a mother and son in a chemist's business, carried on at Sowerby Bridge. In the one the plaintiff, Mrs. Cowgill, represented by Mr. Wood, moved for an injunction to restrain the defendant, her son, from acting as or claiming to be a partner in the business. The defendant, on the other hand, who was represented by Mr. Birrell, M.P., moved for the appointment of a receiver. The evidence, taken on affidavit, having been read,

His Lordship gave judgment. He said that the case was a singular one in its circumstances, and also because of the extraordinary conflict of evidence presented on the affidavits. The parties were mother and son, and the question was whether the plaintiff, the mother, was solely entitled to the business, or whether the defendant was a partner in it. It was clear that prior to his death in 1885 another son of the plaintiff, Brian Booth Cowgill, was the active person in the management of the business. The statement of the plaintiff was that from 1869 until his death Brian was a partner. The defendant, on the other hand, said that Brian carried on business on his own account without any partner, though he from time to time employed the defendant. After the death of Brian, the plaintiff stated that she employed the defendant to assist in the business at a salary of 1*l.* a week and other allowances, but that she finally dismissed him. It appeared that in the period between 1869 and 1885 the defendant was repeatedly away from the business premises, and was not taking an active part in the management, and sometimes for long periods. In particular, on one occasion, as he himself admitted, he went on a voyage round the world. During all that time there was not a scrap of paper, nor an entry in a book, although books were kept, to show the existence of a partnership. If a partnership were subsisting, one would suppose that, as the business was prosperous, and had been in existence from 1869, profits were being made which would have to be accounted for to the defendant. But there was no evidence of any such accounts, or that when the defendant was absent from the business he got anything from his brother on account of these profits. On the contrary, the letters produced distinctly pointed to the defendant being in want of money, and instead of claiming a share of profits which he might be entitled to, he was obliged to borrow money from his brother. In the present state of the evidence, therefore, it was difficult for the Court to conclude that prior to 1885, when Brian Cowgill died, that partnership existed. Then as to the position after Brian's death there was a great conflict of evidence. The facts relied on by the defendant were that he acted as a partner, under the name of B. B. Cowgill, that he gave orders and received orders, and signed receipts under the name B. B. Cowgill. But no act was proved which appeared to his Lordship absolutely conclusive that he was not, as the plaintiff asserted, simply her servant. In that state of the evidence, the conflict being great, without coming to a final decision as to the real merits of the controversy, his Lordship thought it would be best to make an order which, as far as possible, would keep matters *in statu quo*. The plaintiff wanted an injunction to restrain her son from acting as and claiming to be a partner, and the defendant wanted a receiver appointed. The plaintiff, Mrs. Cowgill, was willing to act as receiver if appointed by the Court. She had already been appointed interim receiver during the pendency of the motions, and it seemed to his Lordship, without prejudice to any question, that the best course in the interests of both parties would be to appoint her receiver until the trial of the action, or until further order. At the trial a final conclusion would be come to on the question in regard to which there was so great a conflict of evidence. Judgment accordingly.

ADULTERATED SAFFRON.

At the Birmingham Police Court on May 6, Messrs. Canning & Co., chemists, of 36 Great Hampton Street, were

summoned under the Food and Drugs Act for selling adulterated saffron. Thomas Davis, inspector under the Food and Drugs Act, said that he visited the defendants' shop on the 20th ult., and purchased sixpennyworth of saffron, which on analysis was found to contain 70 per cent. of foreign vegetable and mineral matter. Dr. Hill said that the drug was a very expensive one, was used for colouring pastry and confectionery, and was also largely in use as a children's medicine. For the defence it was stated that the drug was sold in the same condition as it was received in, and was only sold in small quantities by the defendants, who had, therefore, neglected to have the drug tested. The firm was a most respectable one, had been in business for a long time, and had never had a complaint made against them. The Bench said the public must be protected, and fined the defendants 60*s.* and costs.

A EUCALYPTUS CLAIM.—THE MEANING OF "EX WAREHOUSE."

At the Bristol County Court, on Tuesday, the case of Warren v. The Riviera Perfumery Co., remitted from the High Court, was heard before his Honour Judge Metcalfe, Q.C. The plaintiffs, Messrs. A. & J. Warren, wholesale druggists, Redcliff Street, Bristol, claimed damages from the defendant company, trading at Basinghall Street, London.

Mr. H. F. Lawes represented the plaintiffs, and Mr. Wilson Fox appeared for the defendants.

The statement of claim alleged that on January 21 the defendants agreed to sell and the plaintiffs to buy 160 lbs. of eucalyptus oil; that the defendants neglected to carry out the contract; and that plaintiffs in consequence had suffered damage to the extent of 28*l.* Defendants pleaded that they did not agree to sell as stated, that they had not neglected to carry out the contract, that no one had authority to enter into the contract on their behalf; and alternatively it was pleaded that the defendants were at all times ready and willing to deliver the goods.

According to the opening statement of Mr. Lawes, on January 21, Mr. Voigt, who represented the defendant company, called upon the plaintiffs and offered for sale some eucalyptus oil—described as *Eucalyptus Globulus*. There was at the time a great demand for eucalyptus oil, as the medical faculty had recommended it against influenza. The representative of the defendants quoted 7*s.* per lb., which was cheap for that date. The plaintiffs had some of the oil on order from abroad, but could not get it before a certain date. They accordingly asked Mr. Voigt if he was prepared to sell for immediate delivery, and he replied in the affirmative. Thereupon the plaintiffs bought eight tins of 20 lbs. each, and the following memorandum was made of the transaction:—

Bristol, January 21, 1892.

Messrs. Warren, wholesale druggists, Redcliff.

DEAR SIRS,—I hereby offer you eight tins of eucalyptus globulus, at 7*s.* per lb. net, ex warehouse, London, in original tins.

Yours truly, for Riviera Perfumery Company,

A. W. VOIGT.

Accepted as above, A. & J. Warren.

Plaintiffs requested that two tins should be sent at once by passenger train from London. The request, however, was not complied with, and the next morning they received a telegram representing that the sale was unacceptable, and that the stock was sold previously. This was followed by another message:—"No stock at present. Shall deliver as soon as possible." About 11 A.M. on January 22 Mr. Voigt called, and said he was sorry he was unable to execute the order, as the company had sold out, and had not got the stuff. Plaintiffs replied that that was nothing to them; the contract had been made, and they expected it fulfilled. They wrote to the defendant company informing them that their representative had made not a conditional offer, but an absolute sale, and they must hold defendants to it. Thereupon the defendants denied the right of Voigt to enter into such an arrangement. Counsel said plaintiffs had suffered a much greater loss than was represented by the damages claimed, because the demand for and the price of the goods increased after the date on which the contract was entered into. On the 28th the defendants despatched an invoice and tendered 30 lbs. of *Eucalyptus Globulus*, which the plaintiffs refused to receive.

In reply to the Judge, Mr. Fox said he should raise no question about the contract and the authority. It was merely a question of the time of the delivery.

Mr. Algernon Warren, of the firm of A. & J. Warren, said that the defendants' representative gave him clearly to understand that the oil was in London ready to be delivered.

Cross-examined: He was certain that "spot delivery" was mentioned in his conversation with Mr. Voigt. He put no time of delivery upon the bought note because, unless otherwise stated, the absence of any specified time meant immediate delivery.

Mr. John Weston, corn merchant, vice-president of the Bristol Chamber of Commerce, said that if the terms "ex warehouse" were used upon a contract, and nothing to the contrary was stated, it meant that the stuff was actually in the warehouse, and that the sellers were prepared to give immediate delivery.

Mr. Henry Charles Owen, colonial broker, Bristol; Mr. Francis Horner, of Horner & Sons, wholesale druggists, London; and Mr. Thomas Pierre Morson, manufacturing chemist, London, gave evidence of a similar character.

This closed the case for the plaintiffs.

Mr. Fox said he should contend, in the first place, that the agent had no right to bind his principals as to time, because he knew that there was a great demand for the drug, and that the defendants were not in a position to forward under such circumstances. If the contract was entered into, and defendants were responsible for it, no time for delivery was ever mentioned. Mr. Voigt never intended that any time should be mentioned, and he (Mr. Fox) said, notwithstanding the evidence given about "ex warehouse," that no time was given. The question was never discussed, and the plaintiff, in his documentary evidence, had not once referred to the fact that, as he had said in cross-examination, the cases were to be delivered that night by passenger train. He would call evidence to show that the defendants never placed the construction upon the term "ex warehouse" which the plaintiffs placed upon it.

Mr. Voigt, in his evidence, said that when Mr. Warren agreed to purchase the eight tins of *Eucalyptus Globulus*, he brought witness a bought note to sign. Witness carefully read the bought note through to see if anything was specified as to the time of delivery, and seeing nothing of the kind mentioned, he signed it. Before either of the notes was signed, nothing was mentioned about spot delivery. In accordance with the request of the plaintiffs, he wired to the company to send down two tins by passenger train, the rest to come by goods, and at that time he did not know the amount of stock held by the firm in London. He had no instructions to bind the firm as to time, and he had always carefully avoided doing so. If he had had any idea that a question of time was to enter into the contract, he would never have entered into it. During his thirty years' experience of the trade, he had always understood "ex warehouse" to mean that the goods, when taken from the warehouse, were the real property of the buyers, and all carriage was paid by them from that point up to the delivery of the goods. He had never heard that "ex warehouse" meant immediate delivery, or that it implied that the goods were in the warehouse. When he heard from the principals that the goods could not be at once delivered, he called upon Mr. Warren, and at that time he reminded the plaintiffs that no time was specified.

Cross-examined: Nothing was said about the delivery. He understood that the plaintiffs wanted eucalyptus oil badly, and so telegraphed for the two tins to come by passenger train. The remainder were to follow as soon as they were able to be delivered.

Mr. Martin Pearls, of the Riviera Perfumery Company, said Mr. Voigt was a traveller for the company upon commission, without the power of binding his principals as to time. On January 21 the firm had only $\frac{1}{2}$ lb. of *Eucalyptus Globulus* in stock. Afterwards supplies arrived, and they could have completed the contract by March 8. On January 27 the wholesale price of eucalyptus oil was 8s. per lb.

Cross-examined: On January 20 the company wrote to Mr. Voigt saying that the stock of eucalyptus was very small.

Mr. Wm. Baker said he bought eucalyptus oil in London

on January 21 for 5s. 6d. per lb., and on January 27 for 7s. per lb. This was oil of an inferior quality, and the *Globulus* was worth another 1s. per lb.

Mr. Fox reviewed the facts of the case, and

His Honour, who said this was practically an undefended case, gave judgment for the plaintiffs for the amount claimed.

THE PHARMACY ACT—THE UNQUALIFIED SELLER.

At the Glosop County Court, on Saturday May 7, before his Honour Judge Ellison, an action was entered by the Pharmaceutical Society of Great Britain against Stanley Proctor, a youth aged 17, son of Mr. Robert Proctor, chemist and druggist, of Glosop and Hadfield, also against Charles Booth, assistant to Mr. Proctor, for selling drugs containing poison, namely, laudanum, without being qualified according to the Pharmacy Act of 1868. The defendants were represented by Mr. J. W. Tweedale, solicitor, Glosop, and Mr. C. W. L. Flux, London, solicitor to the Society, appeared in support of the actions. Mr. Flux pointed out that proceedings had been taken under section 15 of the Pharmacy Act of 1868. There were two offences against each defendant. The sales took place at the branch shop of Mr. Proctor, at 27 Station Road, Hadfield. From certain reports that were made to the Society, Henry Bradbury was sent to the shop on four different dates to purchase on each occasion two pennyworth of laudanum, and was supplied with the drug on two occasions each by the defendants. These were sealed, and subsequently Mr. Moon, clerk at the head office, proceeded to Hadfield and received the sealed bottles from Bradbury. He had them analysed in due course. Henry Bradbury having given evidence as to the purchase and to handing the sealed bottles to Mr. Moon, Mr. Tweedale appealed for the penalty not to be inflicted, on the ground of infancy with regard to Stanley Proctor, and with reference to Booth that he would lose his situation in consequence of that action.

His Honour remarked that his hands were tied. If Mr. Flux pressed the actions there was no course open to him but to give judgment accordingly.

Mr. Flux said he did press for the penalty. The Society was established to guard against such sales, and they were placed at considerable expense.

Mr. Tweedale then asked the judge to be as lenient as possible with regard to the mode of payment.

His Honour gave a verdict for the penalty, 5s. in each of the four cases, with costs; Proctor to pay the amount at 1s. a month, and Booth within a month.

WHAT IS A STILL?

At the Sunderland Petty Sessions on May 6, an information against the Sunderland Gas Company for keeping a still without a licence was heard before Dr. Potts, Mr. Simey, and Mr. Sanderson, justices. Mr. Alpe conducted the proceedings for the Commissioners of Inland Revenue; Mr. Evans, of Halifax, defended.

Mr. Evans declined to plead, upon the ground that a body corporate could not be made amenable for a penal offence. Mr. Alpe referred to the case of the St. Helen's Tramway Company v. Wood, and cited the Interpretation Act, 1889, and the case proceeded.

Mr. Alpe said that the Spirit Act, 1880, governed the distillation of spirits and the using and keeping of stills for that purpose. That Act was a re-enactment of statutes contemporaneous with 9 & 10 Vict., c. 90, under which the information was exhibited, and which was entitled "An Act to Prevent the Use of Stills by Unlicensed Persons." The Act required "every person, not being a licensed distiller, rectifier or compounder of spirits, or vinegar-maker, who keeps or uses any still or retort" to take out a ten-shilling licence. He said that section 4 of the Act showed very plainly that licences were required to be taken out by persons who used stills in trade or manufactures, for the reason that the statute enacts that "the Commissioners of Inland Revenue may permit the keeping and using of any still or stills by persons carrying on trade or otherwise for the manufacture of any articles other than spirits or spirit-mixtures, upon every person who has a still giving notice thereof to the nearest officers of Excise, and conforming to such regulations as the Commissioners

of Inland Revenue think fit to direct before beginning to use such still as aforesaid"; and that persons who had not such a permit must hold a ten-shilling licence. The Sunderland Gas Company had made no application for a permit, and had not taken out a licence. The still was a portion of their sulphate of ammonia plant. The apparatus was designed for the distillation of gas liquor, which contains a large quantity of ammonia and is vapourised in the still by the application of steam. The vapour passes through piping into a saturator, where it meets sulphuric acid, and there the ammoniacal portion of the vapour is arrested by chemical affinity, and combining with the sulphuric acid crystallises and falls to the bottom of the saturator in the form of sulphate of ammonia, when the crystallisation point is reached. Mr. Alpe did not contend that the process could be scientifically called distillation, but he urged that this point was not essential to his case. He had only to show that the company kept a still without a licence.

Mr. Young, Supervisor of Inland Revenue at Sunderland, proved the keeping of the still, and that it was spoken of as, and called, a "still" by the people on the premises.

Mr. John Steele, Superintendent Inspector of Inland Revenue, said that he had had thirty-five years' experience of stills and the distillation of spirits, and that he considered that the plant contained a still. The still was marked "Davis's patent," and was identical with the sectional diagram of a still for which patent No. 16,349 was granted to George Edward Davis, figured in the specification. The specification, after considerable objection from the bench, was put in evidence. It was headed "Improvements in the construction of Ammonia Stills," and stated that the "invention relates to those forms of stills known as column stills" &c. There was no difference in principle between the still used by the company and the well-known Coffey's still, which is used in most of the great distilleries for the distillation of spirits. In cross-examination Mr. Steele said that there was no worm or condenser in the apparatus, but he considered the long pipe for conveying the vapour from the still to the saturator to be equivalent to a worm and condenser.

Mr. Lewin, analyst at the laboratory, Somerset House, said that the apparatus contained a still. The still was the vessel in which vapourisation took place. The upright column is the "still." He would undertake to distil spirits by the apparatus without any alteration of the plant. He knew, as a matter of history, that the distillation of gas liquor was first effected in 1832.

For the defence, Mr. Evans urged that the Inland Revenue authorities were making an unfair attempt to bring under charge plant which had not been previously charged. The company were already compelled by the Board of Trade to pay 2*l.* for a certificate of registration under the Alkali Works Act, 1881, which subjected them to inspection, and he invited the Court to consider that the number of years during which sulphate of ammonia plant had been used without interference on the part of the Revenue was a good reason for his clients' refusal to pay for a licence. He contended that the still contained in the plant was not a still within the meaning of the Act.

Mr. Ackroyd, Borough Analyst of Halifax, and member of several learned societies, said that the still differed materially from those used in the distillation of spirits. It had no worm, and there was no condensation. The ultimate product was sulphate of ammonia, not a liquid. In cross-examination Mr. Ackroyd said that spirit might be produced from the apparatus as it stood, but he doubted whether it would have any commercial value. He knew Dr. Lunge, of Zurich, by reputation, but not in connection with the distillation of coal-tar, or gas liquor. If Dr. Lunge described the process as "distillation," and the apparatus as a "still," he was no doubt correct. Questioned as to Feldman's still, Lavelle's still, and others, Mr. Ackroyd said that he knew nothing of them.

The Justices retired for a few minutes, and upon their return the Chairman stated that the summons was dismissed. No grounds for the decision were given, and we understand that the question of law will be carried to the High Court.

TESTS FOR HYDRASTININE HYDROCHLORATE.

THE tests usually given for this alkaloidal salt not being very satisfactory, Dr. Martin Freund has looked into the matter, and in a note to the *Pharmaceutische Zeitung* criticises the platinum-chloride and potassium-ferrocyanide tests recognised by the German Apotheker-Verein. It is wrong, he states, to say that the latter reagent gives a precipitate in 10-per-cent. solution of hydrastinine hydrochloride, for it is a reddish-brown colour that is produced; but potassium ferrocyanide gives a precipitate of reddish-brown needles in a dilute solution. The following are the reliable characters and tests:—Hydrastinine hydrochlorate is a very slightly yellow coloured and intensely bitter crystalline powder, which melts between 205° and 208° C. without decomposition, and heated on platinum foil burns without leaving any residue. In water and alcohol it is readily and completely soluble. The aqueous solution is of a yellow colour, fluorescent and neutral. If 0.1 gramme (1½ grain) of hydrastinine hydrochlorate be dissolved in 3 c.c. (50 minims) of water, and 3 drops of this solution mixed with 1 drop of 5-per-cent. platinum-chloride solution, a bright yellowish-brown precipitate is formed, which on the addition of 10 drops of water, and warming, is dissolved. On cooling, the double salt crystallises out in golden yellow needles. Three drops of the above-mentioned solution gives with 1 drop of 5-per-cent. potassium-chromate solution a yellow precipitate in small crystals. On the addition of 10 drops of water, and warming, the precipitate dissolves, yellow crystalline needles separating again on cooling. If to the remainder of the solution 3 drops of soda solution (15 per cent.) are added, a milky-white separation takes place, and on shaking this floats, leaving a clear solution below. The separation is hydrastinine in crystals, and it may be collected, washed, and dried on bibulous paper in the air. So obtained the alkaloid is white, and melts at 116° to 117° C.

Gazette.

PARTNERSHIPS DISSOLVED.

Colns & Cosens, Wellington, Somersetshire, surgeons.
Hopkinson, T., & Forbes, W. T., under the style of T. Hopkinson & Co., Nottingham, wholesale druggists.
Howarth, R. S., & Harlock, E. B., under the style of Howarth & Co., Miles Platting, Manchester, sulphuric acid and chemical manufacturers, as far as regards R. S. Howarth.
Noakes & Clark, Nottingham, size and glue manufacturers; as far as regards F. J. Noakes.
Phillips & Barker, Sheffield, analytical and metallurgical chemists.

SCOTCH SEQUESTRATION.

Erodie, J. P., & Son, Inverness, and Erodie, J. P., sen., and B. J. P., jun., as partners and as individuals, wholesale merchants and acrated-water manufacturers, May 14, at 11, Procurators' Rooms Inverness.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDER.

Verity, Richard, Seymour Street, Portman Square, W., late King's Road* Chelsea, chemist and druggist.

PSEUDOTROPIN.—Dr. O. Hesse has lately made a critical determination of this coca base, which shows that its formula is $C_{17}H_{19}NO_2$.

NARCOTICS IN U.S.A.—The New York State Legislature proposes to put down the consumption of opium in any form, cocaine, and chloral, by severely restricting their sale. The druggists of the State are protesting vigorously, as the law would in effect prevent the sale of most diarrhoea-mixtures and cough-remedies.



Notice to Retail Buyers.—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It would also be recollected that for many articles the range of quality is very wide.

The London Markets.

42 CANNON STREET, E.C., May 11.

The Distressed Drug.

The directors of the Brunswick quinine works announce a dividend of 30 per cent. on the ordinary shares for the year 1891. The capital of the factory is 540,000m., and there is a reserve of 335,000m. The profits last year were 217,277m., of which 55,277m. were divided in bonuses among the staff, and 162,000l. among the shareholders. For 1890 the company paid 40 per cent. dividend. Quinine and cocaine salts are the two staple products, but it is safe to say that the profits are not made out of the latter. The Amsterdam quinine works, however, made no profits last year. Dr. de Vry presided at a meeting of shareholders on April 30, where this disagreeable announcement was made. The method of refining of the quinine is blamed for the unsatisfactory result, and Messrs. Böhrlinger & Sons have been asked to communicate to the Amsterdam people their own processes of alkaloid extraction, an invitation which they have accepted.

ACID (CITRIC).—Very dull and easier, owing, it is said, to the anxiety of certain second-hand buyers, who had bought cheaply, and are now receiving delivery of their goods, to take a profit and sell. Makers quote 1s. 5½d. per lb.; second-hand holders, 1s. 5½d. per lb.

ACID (TARTARIC).—Very dull, at 11½d. for foreign brands. English might be had (second-hand) at 11½d. per lb.

ARECA NUTS.—There has been an arrival of 37 bags from Colombo, per *Bohemia*.

ARROWROOT remains very firm, with sales of 300 barrels *St. Vincent* at 3½d. to 4½d. per lb. for good medium to good. *Bermuda* arrowroot was bought in at 1s. 10d. per lb. at auction.

BICHROMATES.—The manufacturers, English and foreign, of bichromates of potash and soda have held a conference in London, which has resulted in a considerable raising of the price, pot. bichrom. having been advanced from 3½d. to 4½d. per lb. net, and soda bichrom. to 3½d. per lb. net, terms. The chief cause of the previous failure of the syndicate to act with satisfaction to the members consisted in the allowing of large and varying discounts on the official quotations. This practice will now be abolished, as all quotations are to be net in future.

BORAX.—The convention of manufacturers has come to an end. Up to the present time no advance in prices has been announced, and it is still possible to buy at 29½. secondhand, and at 30½. from the makers. It is stated that the conference has led to the admission into the syndicate of certain manufacturers who had kept aloof so far, and that the ring now practically controls the whole of the output of refined borax.

BROMINE SALTS.—There has been no further change in the American and English prices.

CAMPHOR (REFINED).—Is firmer in Germany, and the agents generally ask 1s. 5d. per lb. net, although perhaps 1s. 4¾d. might still buy.

CINCHONA.—At the auctions to be held next Tuesday a very moderate quantity will be offered. At present 1,517 bales are announced for sale, composed as follows: Ceylon bark, 503; East Indian, 430; West African, 454; Javan, 30; and South American Calisaya, 100 packages. The average percentage of sulphate of quinine in the bark offered for sale in Amsterdam last Thursday was 4.65 per cent. There were 6,219 kilos. of Government Ledger stem chips, averaging 10.17 per cent. These sold at 57 to 61 cents per kilo., or 10½d. to 11d. per lb. Druggists' barks were poorly represented at the auctions, and mostly bought in, although a considerable quantity of silvery grey *Succirubra* quill was afterwards sold by private contract.

COCAINE.—There has been a further arrival of six packages crude cocaine from Callao this week.

COCA-LEAVES.—At last Thursday's cinchona auctions in Amsterdam, 73 packages (4,275 kilos.) Java coca, crusted leaf, were bought in, only 6d. per lb. being offered for them. Since then a further consignment of 33 bales has arrived in Amsterdam.

FISH-OILS remain steady, but business is slack. *Cod*-oil is quoted at 22½, pale *Seal*-oil at 22½, to 23½, *Sperm*-oil at 47½, to 48½, and pale *Whale*-oil at 20½, to 20½, 10s.

GALLS (CHINA).—China galls are offering at 46s., c.i.f. terms, for shipment without finding buyers. At auction 115 cases *China* and *Japan* galls were all bought in, the former at 53s., the latter at 50s. per cwt.

GALLS (TURKEY).—The market is stagnant. Our stock is controlled by a few speculators, who have hitherto been able to keep prices up, but, with increased imports, are hardly able to do so any longer. Buyers will not pay the high rates demanded, and quotations, therefore, are quite nominal.

GAMBIER.—The market remains very dull, with sales at 18s. on the spot.

GINGER.—From Calcutta, under date of April 20, a falling market with accumulating supplies is reported. *Cochin* root is again 1s. per cwt. lower, new small washed having sold at auction at 44s. 6d., and medium partly scraped at 47s. per cwt. *Jamaica* of the new crop is also selling at cheaper rates; fine bold at 85s., medium to good medium washed at 55s. to 61s. 6d.; low medium, rather small and dull, at 50s. to 54s. 6d. per cwt.

GUM SANDARACH.—The market is very dull. At auction last Thursday a few packages sold, without reserve, at 59s. 6d. to 61s. for fair palish gum.

GUM TRAGACANTH.—The auctions, for which 1,097 packages are announced for sale, will take place on May 13.

INSECT-FLOWERS.—At present there is no alteration in the price either here or in Trieste.

LIME-JUICE.—The market is very firm and supplies are small. For rather ordinary thick *Jamaica* juice 1s. 8d. per gallon has been paid.

OIL (CASTOR).—According to Calcutta advices, dated April 20, the market remains quiet but steady. Fine oil (which is made from Madras seed) is hardly obtainable, as the seed crop in that Presidency has altogether failed.

OILS (ESSENTIAL).—The reports with regard to the *Otto* of rose crop are contradictory. Some agents have had no advices whatever with regard to any damage to the bushes, others are in possession of news that much damage has really been done, though seasonable weather may still, to some extent, undo the harm. *Menthol* is firm at 9s. per lb. for good white crystals. Our stock is said to be small, and it is reported that there is little, if anything, on the way at present. American oil of *Peppermint* (HGH) is offered at 12s. 3d. per lb.; but Japanese oil is somewhat firmer, 5s. per lb. being now asked. French and Italian oils are very quiet. It is again reported that the geranium plantations in Réunion have been greatly damaged by storms, and that no further supplies of oil can be despatched there for at least six months to come. It is also stated that the

cultivation has become so unprofitable that the planters are preparing to abandon it.

OPIMUM.—Our market has been fairly active since last week, and a satisfactory amount of business is reported at rather better prices for most kinds except *Persian*, for which the tone is dull, while holders would be inclined to accept somewhat lower prices. The last business done in this variety was at the rate of 9s. 3d. per lb. for fine opium. The present quotation for fine druggists' is 7s. to 7s. 3d. per lb.; for good seconds, 6s. 6d. to 6s. 9d. per lb.; for soft shipping, 9s. per lb.; and for good Salonica, 10s. per lb. The market in China, which experienced a considerable fall about the beginning of the month, has since partially recovered. A Smyrna correspondent writes, under date of April 30, that the sales of opium on his market during the month of April amounted to about 160 cases of manufacturing opium, one half of which was taken by the American morphia-makers. The quotations closed at some decline as compared with the end of March—viz., new Yerli opium, nominal, 7s. 3d. to 7s. 4d.; new Karahissar do., 6s. 10d. to 7s.; new Yerli talequale, 6s. 7d. to 6s. 10d.; new Karahissar do., 6s. 5d. to 6s. 6d.; new Karahissar do., slightly, 6s. 6d. to 6s. 7d.; new current talequale, 6s. 3d. to 6s. 4d.; old, according to quality, 6s. 5d. to 6s. 6d. per lb. f.o.b. It is, he thinks, unlikely that any material change will take place either one way or the other until the result of the coming crop is ascertained. The weather continues favourable for crops in general, but no reliable estimate of the opium out-turn can be arrived at before the end of June, when all the crop in the northern districts has been harvested.

ORRIS-ROOT.—The market in Italy is neglected, although the actually available supply is reported to be small. Best selected *Florentine* root has come down to 110s. per cwt.; *Verona* is offering at 44s. to 62s. 6d. per cwt., according to quality.

PEPPER.—Black pepper was in very limited demand at auction, and only a few bags good heavy Tellicherry sold at 3½d. per lb. White pepper, of which a large supply was offered at auction, was exceedingly flat, with small sales of *Siam* at 5d. per lb., and ordinary dark to fair Singapore at 4½d. to 4½d. per lb.

PHOSPHORUS.—The English makers last week advanced the price another ½d. per lb. all round, in order to equalise quotations with the continental makers.

PIMENTO is lower, ordinary dark to fair selling at auction at 2½d. to 2½d. per lb.

QUICKSILVER.—The market is rather firmer. Importers ask 6l. 15s. per bottle; second-hand holders are very firm at 6l. 14s. 6d.

QUININE.—Lower. A sale of 10,000 oz. Brunswick quinine was reported by the agents yesterday at 9d. per oz., but from 6,000 to 8,000 oz. B. & S. and Brunswick in second-hands have also been done at 8½d. per oz. The Brunswick agent still offers to sell at 9d. per oz.

SHELLAC.—The market last week closed with much activity and considerable sales at higher prices. Second orange TN for May delivery sold at 75s., August 76s. September 74s., and October 75s. per cwt. and on the spot up to 75s. was paid for good second orange, 70s. to 71s. for AC garnet, and 80s. for first button lac. In the early part of the present week further improvement was shown, and considerable business in all varieties was reported upon the spot and for delivery at improved prices. From Calcutta also a decided advance in price was cable. At auction only 433 cases were offered, of which about 300 sold at an advance on orange lac of fully 5s. upon the last sale prices, though this shows a slight decline upon the prices which had been paid privately. Button and garnet were 2s. above the previous auctions, or fully up to the highest point touched privately. The following prices were paid:—*Second orange*, good pale unworked, 79s.; fair flat pale (worked) and reddish (unworked), 74s. to 76s.; curly to fair reddish livery (unworked), 72s. to 75s. per cwt. Good unworked AC garnet, 73s. per cwt.; good first unworked button, 82s. per cwt. Privately the market remains steady, but the amount of business transacted since the auctions has been very small. Orange TN for June, July, and August is quoted at 76s., October at 74s. 6d. per cwt.

STICKLAC is quiet, and may be had at 80s. to 82s. 6d. per cwt. for fair Siam.

TURMERIC.—The market is dull. Cochinn root in split bulbs realised from 6s. 9d. to 8s. 3d. per cwt. for ordinary to fair quality at auction this week.

WAX (JAPAN).—A falling market, with sellers of good pale squares at 40s. per cwt., but very little interest on the part of the trade. At auction, on Tuesday, 50 cases good pale squares were bought in at 43s. per cwt. nominally.

Thursday's Market News.

42 CANNON STREET, E.C., May 12.

London. Our drug and chemical markets are fairly steady this week, but there have not been any changes of great importance, except in the case of bichromates of potash and soda, which have been considerably advanced, owing to the action of the syndicate. Refined camphor is slightly higher, and there has been a small increase in the price of phosphorus. Cream of tartar is firmer. Citric and tartaric acids are easier, and guanine has had another drop. At to-day's drug auctions a rather steady tone prevailed, and a considerable proportion of the goods offered found buyers. Vanilla was dearer for fine, and very firm for medium and ordinary grades. Rhubarb is higher. Cardamoms sold fairly well. For Dragon's blood of fine quality a very high price was paid. Buchu-leaves, gamboge, and gum benzoin are rather easier; common and damaged jalap is much lower; good qualities bring steady prices. Honey is 2s. to 3s. lower, and beeswax and Japan wax are also easier. Ipecacuanha sold at firm rates at first, but afterwards lower prices were accepted. Crude camphor, menthol, and opium are reported firmer, and for lime-juice high rates have been paid. In spices, pimento, Cochinn ginger, and Jamaica ginger are lower, nutmegs are firm, and arrowroot somewhat dearer. Zanzibar cloves are lower, white and black pepper flat (black Penang lower), and tapioca also cheaper. Indiarubber has fallen slightly. Nitrate of soda is flat. Quicksilver is firm. Linseed, rape, and cotton-seed oils are quiet. Turpentine is rather dearer, and petroleum is weak. Gambier sold cheaper on the spot to-day, but shellac is much higher since last week. The Bank rate remains unaltered at 2 per cent. Bar silver is 39½d. per oz., and the Eastern exchanges are quoted as follows:—Bombay and Calcutta, 1s. 3½d.; Hong-Kong, 2s. 9½d.; Shanghai, 3s. 11½d.

Liverpool. Our correspondent informs us that there has been a decline in the value of Sierra Leone chillies and Quillaia bark. The recent advance in canary seed has been maintained. African ginger remains dull of sale, while Maianham copaiiba and Kola nuts keep up well, with a much reduced stock. Sulphate of copper has advanced and is now exceedingly firm. Castor oil remains neglected.

ALOES.—Of *Curaçao* aloes 171 cases were offered to-day and sold at 55s. for fine bright brown in gourds, 35s. to 40s. for good red liver, down to 25s. for rather dark and from 17s. to 11s. per cwt. for common Capey and drossy. Three cases so-called "*Curaçao*" aloes from New York, believed to be Socotrine in tins, of fair colour and flavour, sold at 76s. per cwt. *Cape aloes* are very scarce, and none were offered at auction to-day.

AMBERGRIS.—At to-day's auctions 3 tins (20 oz.) of medium quality, dark and gray, rather ordinary flavour, sold at 78s. to 79s. per oz.; very dark and undeveloped at 57s. 6d. per oz., subject to approval. Two small lots, together 6 oz., of fine quality also sold, at 6l. 5s. to 6l. 10s. per oz.

ANISE.—Seven cases genuine but rather broken Chinese star-anise, *via* Hamburg, were bought in at 105s. per cwt. An offer of 90s. was refused for them. Twenty cases fair seed from Bombay sold at 17s. 6d. per cwt. to-day.

ANNATTO.—Twenty-seven bags were all sold to-day, rather dull (from Madras), at 3½d. per lb., which shows a firm market, and common at 1d. per lb.

ANTIMONY.—There are buyers of crude Japanese on the spot at 23s.; for arrival nothing is offering at present.

BAEL.—No demand. Eighty bales very wormy dried

fruit from Calcutta were bought in at 3d. per lb. nominally, an offer of $\frac{3}{4}$ d. per lb. being refused.

BALSAM (COPAIBA).—Five casks Pará, thin pale to yellow were bought in at 1s. 9d. per lb. to-day. Of 12 tins from Bahia, 3 common red brown colour sold at 1s. 4d. per lb.

BALSAM (PERU).—Thirty-one cases were bought in at auction to-day at 5s. 3d. per lb. The owner says that he would take 5s. per lb., but we do not think he would be able to command that price.

BUCHU.—There was a further decline in price of about $\frac{3}{4}$ d. per lb. at to-day's auctions. Of two parcels of 39 bales, 29 sold at $\frac{3}{4}$ d. to 4d. (mostly $\frac{3}{4}$ d. per lb.) for slightly yellowish to good round green, slightly stalky leaves.

CALUMBA.—High prices are still asked, but little demand was shown. To-day, of about 120 bags, nothing sold at auction; fine yellow and wasbed was bought in at 60s.; and for fair sorts, partly wormy and grey mixed, 35s. was refused.

CAMPOR (CRUDE).—Prices are reported higher from the East, and Japan camphor for arrival is now quoted at 107s. 6d. to 108s. per cwt., c.i.f. terms now; on the spot the price is said to be 117s. 6d. per cwt.

CANNABIS INDICA.—Holders are asking more money. Of 81 Robbins offered at to-day's auctions 20 were reported sold before the sales, the remainder, grey to greenish stalky tops, very dusty, was bought in at 5d. per lb.

CARDAMOMS.—Of 126 boxes, about three-fourths sold without any appreciable alteration in price. *Ceylon Mysore* round and long pale at 2s. 4d.; medium to bold yellow, 2s. to 2s. 1d.; small and long ditto, 1s. 6d. to 1s. 7d.; brown and grey split, 1s. 1d. to 1s. 2d.; small to medium long and round mixed, 1s. 3d. to 1s. 4d. *Ceylon Malabar*: Medium to bold palish, 1s. 11d.; small brown and pale, 1s. 1d. to 1s. 2d.; fair round medium to bold pale Mangalore character, 2s. 1d. to 2s. 2d.; partly split and smaller ditto, 1s. 2d. to 1s. 4d. *Seeds* realised from 1s. 4d. to 1s. 6d. per lb.

CASCARA SAGRADA.—Steady. The 40 bags of fair, rather small quality bark, which have been offered once or twice before, sold to-day at 25s. per cwt.

CINCHONA.—Seventy-two packages South American crown bark were mostly sold to-day, *Guayaquil* in dull dusty brown chips bringing from 8d. to 1s. per lb., while fair grey silvery *Loxa* was bought in at 1s. per lb. Another parcel of 36 serons *Huanoco* in good long brown quills realised 1s. 2d. to 1s. 3d. per lb.

CIVET.—Two parcels were shown to-day and bought in 7s. 6d. per oz. being suggested as the price for fair quality.

COCAINE.—The price is higher. Some business was done in hydrochlorate this week at 13s., but now 18s. 6d. per oz. is asked.

COCA-LEAVES.—Seven bales good stout green and brown mixed *Huanoco* leaves were bought in at 2s. per lb. to-day. One small bag of small dark leaves from Ceylon was bought in at 1s. 6d. per lb.

COLOCYNTH.—Very neglected. Nineteen cases dark seedy and broken Spanish, all damaged, were bought in at 6d. per lb. to-day. Good pale Turkey apple is held for 1s. per lb.

CROTON-SEED.—Nine bags fairly bright mixed Cochon seed sold at 15s. per cwt. to-day, very common dull ditto at 3s. per cwt.

CUBEBS.—The market is very quiet. Twelve bags from Bombay were offered to-day, and all bought in, small brown berries, free from stalks, at 9l. per cwt.; bluish bold and rather stalky berries at the same price.

CUMIN-SEED.—*Malta* seed is very dull and neglected, but the nominal price for fine seed of the last crop remains 38s. to 40s. per cwt. At auction 27s. per cwt. was asked for ordinary quality, and 20s. for *East Indian*.

DRAGON'S-BLOOD.—Four cases very fine saucers, somewhat damp, but of excellent quality, and unusually fine colour, sold at 11l. 15s. per cwt. at auction to-day, while low bricky colourless slabs were bought in at 40s. per cwt. For 6 cases fair finger in reed an offer of 6l. 12s. 6d. per cwt. was refused. Another parcel of 11 cases bold slabs of dull

fracture, partly coated with fine gum, sold "without reserve," very cheaply, at 82s. 6d. to 90s. per cwt. It was recently bought in at 6l. per cwt. *Socotrine* drop is not in much demand, and at to-day's auctions 9 cases of fair quality were bought in at 95s. per cwt. nominally. Three cases very dusty pickings sold at 76s.

ERGOT OF RYE.—Six bags small to medium fair Spanish ergot sold at 2s. 4d. per lb. to-day.

GAMBAGE.—Is in good supply, and sold to-day at rather lower prices, 12l. 12s. 6d. to 12l. 15s. being paid for good bright, partly ricey, soft and cakey pipe from Singapore, and 8l. 17s. 6d. for common bold dull grey Saigon slabs. For 8 cases good bright orange broken pipe, very much run, 13l. 10s. was paid, and from 11l. 15s. to 12l. 15s. for less desirable 10's; bold broken pipe of fair colour, rather dull, sold at 10l. 15s.

GUM AMMONIACUM.—For six cases very good pinky to pale loose drop, slightly blocky, a bid of 42s. 6d. per cwt. was refused to-day.

GUM ARABIC.—Fine pale picked Alexandrian gum was bought in at 20l. to-day, but at that price it is not possible to effect sales. There is one holder who asks 19l. 19s. for similar quality, but cannot sell at that rate. Of *Cape* gum glassy brown sorts sold at 40s., dark and dusty ditto at 20s. per cwt. For rather dark to fair bold ambery picked Aden from 55s. to 60s. was paid, and 27s. for pale siftings. A parcel of fair ambery Kurrachee was bought in at 70s. per cwt.

GUM BENZOIN.—Of Siam gum only three cases were sold to-day at 10l. to 10l. 2s. 6d. for fair pale almonds partly small and blocky, and at 80s. for common dark-brown siftings in block. *Sumatra* gum sold at a decline of from 2s. 6d. to 5s. per cwt.; fine pale almondy seconds, fairly packed, at 8s. 2s. 6d.; small to bold almonds, fair seconds, false packed corners, 6l. to 6l. 2s. 6d.; rather dull seconds and considerably false packed at from 5l. 5s. to 5l. 15s.; fair glossy brown. *Penang* realised 70s. to 71s.

GUM ELEMI.—Six cases good pale Manila, of fine flavour, were bought in at 48s. per cwt.

GUM KINO.—Scarce and dear. Two cases fair small sold at 70s. per cwt. to-day.

GUM MYRRH.—The market is firm, and the demand remains very strong. Thirty-one packages offered to-day were all sold with good competition—good picked at 5l. 15s. to 6l.; dark brown (Aden) picked, 97s. 6d. to 5l. 2s. 6d.; dusty to good clean medium sittings, 45s. to 65s.; dust at 30s. to 37s. 6d. per cwt. For seven cases fair sorts 77s. 6d. was paid.

GUM OPOPONAX.—Seven tins (131 lbs.), the balance of a parcel offered a few months ago, were again placed in sale to-day—this time without reserve. Loose drop of fair flavour and good yellow colour sold at 11s. 6d. per lb. (on the last occasion the owner wanted 40s.), blocky drop and sittings at 4s. to 6s. per lb.

HONEY.—New Jamaica honey was offered plentifully at to-day's sale, and fell in price from 2s. 6d. to 3s. per cwt. as compared with the last auctions, 31s. to 32s. being paid for good liquid clean amber and red, and 26s. to 27s. for dull brown. *Chilian* also sold at lower rates, 11l barrels being placed to-day at 31s. to 30s. 6d. for fair palish hard sweet, and 24 to 25s. 6d. per cwt. for yellow and dull. For 33 barrels rather thick and fermented brown honey from Lisbon, 23s. per cwt. was refused. One dark lot sold at 19s. 6d. per cwt. Of so-called *Utah* honey 50 packages of thick yellow to brown sold cheaply at 20s. to 22s. per cwt. Forty-five cases *Eucalyptus* honey were bought in at 30s. to 40s. per cwt. to-day.

IPECACUANHA.—Of Rio root 55 serons were offered to-day, of which 35 sold, (partly with fair competition), at an advance of about 1d. per lb., but subsequently at rather easier prices. Sound and slightly damaged root, good fleshy, brought from 7s. 7d. to 7s. 10d.; medium to lean and wiry round, 7s. 6d. down to 6s. 11d.; slightly damaged root from 6s. 8d. to 7s. 3d. per lb. Of *Carthagena* root 40 bags damaged were shown, but all bought in at 5s. 6d. to 6s. 6d. per lb., according to quality.

JALAP.—A parcel of 38 bags, forming part of the recent large arrivals, sold to-day at a decline of from 2*d.* to 3*d.* per lb. for damaged lots, small to medium Vera Cruz, rather light, realising 1*s.* 1*d.* to 1*s.* 2*d.*; very mouldy and dull from 7½*d.* to 9½*d.* per lb. Another parcel of medium to bold good heavy Vera Cruz, however, sold at the unaltered price of 1*s.* 3*d.* per lb.

KAMALA.—A bid of 6½*d.* per lb. was refused to-day, but the market is easy, and 10*d.*, at which the drug was recently held, is no longer obtainable.

KOLA NUTS.—Fair dried brown West Indian kolas sold at 3*d.* per lb. Holders are firm. To-day they refused 3*d.* per lb. for good West African dried chips. Another parcel of 21 packages, also African, was partly sold at 5½*d.* to 6½*d.* for good brown chips and 3*d.* per lb. for medium.

LIME JUICE.—At to-day's auctions 10 puncheons good clean yellow Jamaica were bought in at 1*s.* 9*d.* per gallon.

MUSK.—The only parcel sold to-day consisted of two caddies dry and well-trimmed but very false-packed third-pile Tonquin pods, which brought from 23*s.* to 30*s.* per oz.; for first-pile pods, small to bold blue skin, rather broken, well trimmed, 68*s.* 6*d.*; and for ditto old-fashioned slightly damp blue skin and underskin, 57*s.* 6*d.* per oz. was refused; for ordinary old-fashioned, with thick skin and rather damp, offers from 47*s.* to 50*s.* per oz. were also declined.

NUX VOMICA.—Unchanged and steady. Forty bags fair grey small to medium seeds from Bombay sold at 8*s.* 9*d.*, small and dark ditto at 7*s.* per cwt.; and for 15 bags fine bold pale, partly greenish mixed silky seeds from Bombay, 12*s.* 6*d.* was paid.

OILS (ESSENTIAL).—Twenty cases *Eucalyptus* oil of five tins each, Kangaroo brand, Australian, were bought in at 2*s.* 7*d.* to-day. For twenty-one cases *Cinnamon leaf* oil, each of 36 bottles, there was no bid at 1½*d.* per oz. Turkish *Geranium* oil is limited at 10*d.* per oz. It is said that the crop in Algeria is expected to be a very good one this year; it will be gathered about the end of this month. Four cases pale Java *Nutmeg* oil sold at 3½*d.* per oz. to-day, a decline of about ½*d.* per oz. on the previous value. For a case of Fischer's *Kananga* oil a bid of 2*s.* 7*d.* per oz. was refused, while 17*s.* 6*d.* per oz. is believed to have been declined for 12 bottles of fair *Yang-yang*. Three tanks brown *Citronella* sold cheaply at 3*d.* per lb.

ORANGE-PEEL.—For 2 packages fine bright narrow-strips from Bombay, 1*s.* per lb. was refused, 1*s.* 2*d.* being the price.

ORRIS.—At to-day's auctions 30 bags Italian were partly sold "without reserve" at 67*s.* per cwt. for bold but yellow *Verona*. Good pale picked *Florentine* was bought in at 120*s.* per cwt.

QUASSIA.—For 33 bags fine slightly yellow chips, London made, 12*s.* per cwt. was made, and for 11½ tons from St. Kitts from 80*s.* to 82*s.* 6*d.* per ton.

QUILLAI.—There has just been another heavy arrival from Valparaiso. At to-day's drug sale 52 bales sold at a considerable decline: Fair quality, at 19*l.* to 19*l.* 10*s.*; loose and damaged at 15*l.* 10*s.* to 16*l.* per ton.

QUININE.—At to-day's sales 10,000 oz. bulk quinine (B. & S. and Brunswick) were offered; a bid of 8½*d.* for the former and one of 8½*d.* for the latter was refused.

RHUBARB.—The London stock is now very small, and the article is in an exceedingly favourable position, especially as regards *High dried*, of which not 20 cases are said to be in our warehouses. At to-day's auctions prices advanced from 1*d.* to 2*d.* per lb. in some instances, and of 32 cases 18 sold at 2*s.* 10*d.* for fair even-coated round druggists' root; 2*s.* for Shensi small to medium fair orange-coat, three-fourths pinky, one-fourth dark, round; 1*s.* 10*d.* for ditto fair coat, small, round, even, pinky-grey fracture, rather rough; 1*s.* 8*d.* for small to medium, fair pale coat, three-fourths pinky, one-fourth dark, round; 1*s.* 6*d.* for small to medium fair coat, three-fourths pinky, one-fourth grey, rather spongy, round; 1*s.* 5*d.* for small fair coat, partly rough, three-fourths dark and grey, flat; and 1*s.* 2*d.* to 1*s.* 3*d.* for medium to bold dull, horny coated, three-fourths dull grey and one-fourth dark fracture.

SARSAPARILLA.—Nineteen bales good grey *Jamaica* root sold at full prices to-day, 1*s.* 6*d.* being paid for sound, and 1*s.* 3*d.* to 1*s.* 5*d.* per lb. for damaged root. A parcel of dull pale native *Jamaica* sold at 12*d.* to 12½*d.* per lb. to-day, and for 10 bales damaged *Lima Jamaica* from 9½*d.* to 11½*d.* per lb. was paid.

SENEGA.—At auction to-day 6 bales were bought in at 1*s.* 8*d.* per lb.

SENNA.—*Timnevelly* is firmly held, and of 200 bales offered to-day, mostly owned by second-hand holders, only a small proportion sold, at 3½*d.* to 4*d.* for fair medium greenish but specky, 2*d.* to 2½*d.* for small to medium yellowish, and down to ¾*d.* for very common.

SOY.—Fifty-nine casks of China soy were offered to-day without reserve, and sold at a considerable reduction in price—viz., 12*d.* to 13½*d.* per gallon, probably the lowest figures on record.

TURMERIC.—The market is dull, and much lower, except for Madras of fine quality, of which 21 bales good bright finger sold to-day at 30*s.* 6*d.* to 31*s.* per cwt. *Bengal* is not worth more than 18*s.* to 18*s.* 6*d.*, and *China* root, according to quality, is quoted at 17*s.* 6*d.* to 22*s.* 6*d.* per cwt.

VANILLA.—At to-day's auctions 304 tins were offered nearly all of which sold with a good demand at an advance of 6*d.* to 1*s.* per lb. for fine quality, and firm rates for fair to good brown beans. There was a parcel of 9 tins Mexican vanilla from Vera Cruz—the first direct import of this kind which has been received in our market for several years; the quality is good, and for beans from 7 to 8 inches long 20*s.* per lb. is required, an offer of 14*s.* being declined to-day.

WAX (BEES).—Jamaica was barely firm, and in some cases slightly cheaper; other varieties showed a distinct decline to-day. The following prices were realised:—*Jamaica*, fine even red and orange, 7*l.* 2*s.* 6*d.* to 7*l.* 7*s.* 6*d.*; brown and red ditto, 6*l.* 15*s.* to 7*l.*; *Australian*, good mixed colours, 6*l.* 17*s.* 6*d.* to 7*l.* 5*s.*; *Zanzibar* good even orange, 5*l.* 10*s.*; *Madagascar* fair chocolate to good pale bright, 5*l.* 5*s.* to 6*l.* 2*s.* 6*d.*; and orange Mogadore, 6*s.* per cwt.

THE LIVERPOOL MARKET.

BALSAM COPAIBA.—Stocks are much reduced, and holders now ask 1*s.* 8½*d.* for cloudy *Maranhham*, and 1*s.* 9*d.* for bright.

CALABAR BEANS.—Sales of good at 2½*d.* 2*d.* was bid at auction, but refused.

CANARY-SEED.—The market during the week has been characterised by a steady and well-sustained advance. Large parcels have changed hands, and 50*s.* has been paid freely. 52*s.* 6*d.* is now talked of, as stocks in Smyrna are said to be very small.

CASCARILLA.—Thirteen bales small broken and dusty were offered, but did not find a buyer at auction.

CHILLIES.—*Sierra Leones* have been somewhat easier, and 40*s.* has been accepted for fine reds.

CREAM OF TARTAR is slightly firmer, and holders are asking 90*s.* for first white crystal. Prices forward are higher.

FENUGREEK SEED.—A parcel of ordinary brown Egyptian has been sold at 8*s.* 6*d.*

GINGER is neglected, and the parcels just landed do not find buyers at 27*s.* 6*d.*, below which holders refuse to go.

GUINEA-GRAINS.—Fifty bags common dull and dusty sold at 24*s.* for shipment.

THE SMYRNA OPIUM MARKET.

(Telegram from Our Correspondent.)

SMYRNA, Wednesday night.
FURTHER sales of 100 cases manufacturing opium, mostly for America, have taken place this week, at prices ranging from 6*s.* 3*d.* to 6*s.* 7*d.* per lb., f.o.b. Smyrna, according to quality.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulae consult the last volume, if you have it.

Letters, queries &c., will be attended to in the order received.

The Patent-medicine Stamp.

SIR,—If a majority of the trade express a desire for the abolition of the Patent-medicine Stamp Act, there will probably not be much difficulty in the way. When the stamp authorities in the United States became aggressive and demanded that stamps should be affixed contrary to previous custom, they "magnified their office" till it blew up and their occupation was gone.

English chemists are more patient, being content to pay away a good share of their profits in stamps. Any retailer could as easily get 2s. 9d. for his mixture without a stamp as with it.

It is a drain on the public and the chemist, and exists for the sole benefit of three classes:—

1. The officials at Somerset House.

2. The spies who, I hear, get rich on their share of the fines imposed on chemists.

3. Receivers of "unearned increment," whose wealth arises solely through indirect taxation and the exemption of publicly-created land values.

If the trade are so fond of the first and second classes of gentry as to wish to perpetuate to them an easy job, big pay, and no risk, and of the third as to desire to heap wealth upon a class who already suffer from a surfeit, by all means resist the abolition of the Act, or go in for a double tax.

But any who think that it is a bad time to put an extra tax on a man when he is sick, a wrong thing to put a tax on chemists which other tradesmen do not have to bear, and a danger to the community that poisons should be supplied by drapers and grocers when under the seal of the stamp, will go in thoroughly for the abolition of an antiquated tax (which is tolerated in no other country in the world), and clear it out as soon as it is brought before the next Parliament.

Personally, the abolition of the Stamp Act is a matter of indifference to me, as the goods I make are not liable. I will, however, be happy to co-operate or assist in any way if a large number of chemists wish this tax abolished. I am pretty sure there will be no difficulty if it is tackled in the right manner.

Milan, April 27,

Yours truly,
S. M. BURROUGHS.

"The Chemist and Druggist" as a Court of Appeal.

SIR,—In reference to the recent action of the Pharmaceutical Society of Ireland against my late partner, Mr. G. P. Beater, in our general business as chemists and druggists, I think it is only due to him and to the public to state the facts of the case, which are these. For the last sixteen years, or since January, 1876, I have been the sole working partner in the business, first carried on as Beater & Co., and subsequently as Hoyte & Son, Mr. Beater's capital being in it, but otherwise he had nothing to do with the management of the business, being by profession an architect, and fully engaged with his duties.

I obtained my qualification in January, 1883, and since that time conducted the compounding solely in my own name, and under the charge of a qualified chemist, and in order to put my position beyond a question, rented the dispensing depart-

ment at an annual rent. It was, therefore, a matter of surprise to me to learn that the Society contemplated taking action against Mr. Beater under the circumstances I have stated, considering that at the time of the passing of the Act, and subsequently, various members of the Council had unqualified partners, including Mr. Hayes himself, and that up to January, 1891, as I understand, the father of Mr. Wells was in a similar position as Mr. Beater, only that Mr. Wells, senior, was actively engaged in the general business, whereas Mr. Beater has always been a sleeping partner. Mr. Wells was also aware that a dissolution of partnership had been spoken of, notices to that effect having been printed: this made the action of the Council the more invidious. And had I wished to be litigious, it is quite an open question whether the Society would have been successful against Mr. Beater, as on a previous occasion the Solicitor-General decided in my favour in the question of an apprentice's certificate; but for peace sake, and to avoid publicity, I consented on the part of Mr. Beater to pay a fine of five pounds—not ten, as stated.

In conclusion, I beg to say it would have been more courteous and consistent if the Society had sent Mr. Beater such an official intimation of any alleged infraction of the law as I perceive was done in the case of Mr. Selkirk and Mr. Boyd.

I am, yours faithfully,

JAMES N. HARDY, L.P.S.I.

Sole Proprietor Hoyte & Son.

Dublin, May 7.

The Veterinary Chemist Defence Fund.

SIR,—As one of the subscribers to the above fund I beg to thank you most heartily, not only for the very handsome way in which you headed the subscription-list, but also for the prompt and effective manner in which you tackled the opposite party. There is not the slightest doubt that had it not been for your straightforward action in this matter, we should have been "got at" piecemeal, with the result directly opposite to what you have attained. This is another example of the old adage that "union is strength," and should be a lesson to some of our faltering brethren. I now write to propose that the amount promised should be paid into a sort of reserve fund, in case it is needed. Many of us may be able to add to it from time to time, until sufficient is collected to contest the case, should our opponents try it on; but this is very doubtful, and we shall continue, as we have done for years, to use the adjective "veterinary," until they have established their exclusive right in a court of law.

B. (25/40.)

[We are obliged for the above kind remarks; but we do not think it would be advisable to pay over the cash until there is an actual necessity for it. If the question has to be fought much more will be wanted, and we hope a good many other subscribers will then come in.]

A Postal Feat.

SIR,—On March 15 a London house posted a price-list to me inadvertently addressed Grimsbury, *Bombay*; to-day it was duly delivered to me at my proper address, Grimsbury, *Banbury*, and in no way the worse for its lengthened journey and most unusual route of over 14,000 miles from London to the "town o' cakes," and at a cost of one halfpenny, taking just seven weeks, and averaging 2,000 miles a week. In these days of grumbling at some departments of Her Majesty's Government, I think the above reflects great credit upon all officials concerned, both English and Anglo-Indian.

Yours faithfully,

Banbury, May 3.

A. H. HINDE, A.P.S.

A Still Suggestion Wanted.

SIR,—Will some of your experienced correspondents kindly say what is the most approved and "up to date" form of still for the recovery of spirit from tinctures and other preparations.

The still in contemplation should be capable of containing from 10 to 15 gallons of the liquid to be distilled, should be

made of copper, and be heated by steam. Any suggestion on the part of your readers will be thankfully appreciated by
Yours faithfully,
May 10. "THUS." (29/73.)

Consuls and British Trade.

SIR,—I have read your comments upon the proposal made by a correspondent of the *Times* (Sir Edgar Vincent) that consuls abroad should receive a commission on imports of British goods under their respective consulships and substitute these commissions in lieu of one-half or one-third of their present salaries.

This might stimulate the zeal of some, but I am writing to assure you that every consul and ambassador I have happened to meet with in my travels has manifested the liveliest interest in promoting British trade. The American representatives are also similarly disposed to help American trade. While on my present journey, made chiefly for the purpose of visiting our agents in Italy, France, Spain, and North Africa, and for arranging for an extension of our trade with these countries, I have always met with the greatest courtesy and have received valuable information from all ambassadors and consuls, among whom it is due that I should specially mention Lord Dufferin and the American Consul-General in Rome, the English Consuls in Venice, Palermo, Florence, and Barcelona, the American Consul in Naples, Mr. Hoare, the British Consul in Trieste—General Grubb, the American Minister in Madrid, the British and American Consuls in Seville, Cadiz, Cordova, Grenada, Tangier, Oran, Algiers, and Marseilles. None of these, or any other consuls I have met with, need any stimulus in the way of commissions to encourage their desire to promote trade relations.

My firm being both English and American I have received the best consideration of the representatives of both countries. If the consuls lack anything it is opportunity, for it is so seldom that any principals or travellers of English houses visit these countries, and it is only such who can intelligently conduct negotiations in these times of sharp competition and trade specialism.

British diplomatic ambassadors have their hands quite full enough in promoting international peace and the general principles of free trade in these days, when persons who make a profit in protection at the cost of their neighbours are so busy in talking up the advantages of tariffs. Such persons certainly have all the advantages on their side if not the sound arguments.

A consul who has not had special experience in any particular line of trade cannot be expected to attend to it as well as one who comes out representing a business which he thoroughly understands. Besides this, consuls have to remain in their offices during business hours to attend to their regular work. When we consider the great amount of time spent in arranging the details of any large business, though it may consist of but one or two specialties, we see how unreasonable it would be to expect consuls to attend to the business of every wholesale or manufacturing firm of the country he represents, which can only be done properly in person by the principals or representatives of the houses who wish to establish or extend a foreign trade.

I was much surprised to be told by leading houses in the drug trade along North Africa, and in some parts of Italy and Spain, that they had never before seen anyone connected with the drug trade of England or America in those parts. The English trade journals do a great deal of good, and in places have been the means of introducing new lines and houses, but such personal attention by travelling as is given by German houses to their business in countries bordering on the Mediterranean is essential to the building-up of an extensive trade.

If any consuls would prefer to have a commission from the Government in lieu of part of their salary, as suggested, I think it should be given them; but I believe consuls generally are already doing their best to promote trade interests.

Berlin, May 3.

S. M. BURROUGHS.

P.S.—I should think a great deal of good might be accomplished if the British Government would supply to consuls for distribution literature advocating free trade, selections from the speeches of the great free-traders Cobden, Bright,

and others, or copies of Henry George's "Protection or Free Trade," which is doing much good to the free-trade cause in the United States.

DISPENSING NOTES.

The opinions of practical readers are invited on subjects discussed under this heading.

Terebene Mixture.

SIR,—What reaction occurs in the following mixture causing it to change from white to dark blue?

Terebene	3ij.
Pulv. tragac.co.	5j.
Syr. simp.	5iv.
Potass. iodid.	3j.
Aq. ad.	3viij.

It was tried with pulv. tragac. fer., 10 grains, thinking that it might be caused by some iodine liberated from the iodide of potassium producing "iodide of starch" by contact with the compound powder, but this unfortunately gave the same result. The opinion of your readers would oblige.

Yours truly,

April 27. D. S. DAVIES.

Readings of the Indian Prescription.

Mr. Arnyer,—

Mist. camph.	5iv.
Tr. card.co.	5ss.
Spt. ammon.	5ss.
Tr. camph.co.	5ss.
Vin. ipecac.	℥2.

Brighton, April 30. C. S. ASHTON.

Pot. nit.	5iv.
Glycerini	gr. xv.
Tr. camph.co.	5ss.
Vin. ipecac.	℥2.

112 St. George's Road, Southwark, S.E. ARTHUR AKAM.

Mist. camph.	5iv.
Pot. carb.	gr. v.
Spt. am.	5ss.
Tr. camph.co.	5ss.
Vin. ipecac.	℥2.

Can't decipher first line. F. W. (25/70.)

Horasomni.

Mist. camph.	3ij.
P. Doveri	gr. iv.
Spl. ammon.	5ss.
Tr. camph.co.	5ss.
Vin. ipecac.	℥2.

Yours, &c.,

May 5. CEPHAELIS. (29/41.)

[The correct rendering is:—

Mist. camph.	5iv.
Pot. nit.	gr. xv.
Spt. am. ar.	5ss.
Tr. camph.co.	5ss.
Vin. ipecac.	℥2.

The first line is the name of the patient.—ED. C. & D.]

A. Quinine Mixture.

43/10. *Eteroce* has had the following to dispense:—

Ferri et quinine cit.	gr. xlvij.
Sodii bicarb.	5ij.
Sodii et potass. tart.	5ij.
Aq. ad.	5vi.

He dissolved the citrate in 1 oz. of water, the soda salts in boiling water, and mixed. The mixture was clear while hot, but deposited on cooling.

[We may note that bicarbonates should never be dissolved in boiling water. That is how to reduce them to carbonates. Quinine is precipitated by all alkalies, and Rochelle salt precipitates it as well as cinchonidine. It is impossible, therefore, to have a permanently clear mixture from the above. When will such ignorantly conceived prescriptions vanish?—Ed. C. & D.]

LEGAL QUERIES.

Consult *Alpe's "Handy-book of Medicine-stamp Duty"* in regard to patent medicine questions.

General information regarding the laws affecting chemists and druggists is printed in *THE CHEMISTS' AND DRUGGISTS' DIARY*, 1892, pp. 161-5.

For stamp duties, licences, Customs regulations, &c., see the *DIARY* pp. 151-9.

40/25. *Pulmonic*.—If you describe a compound medicine on the label as "a certain cure" for any human complaint, that circumstance by itself renders the preparation liable to medicine-stamp duty.

25/2. *Enquirer*.—To convert your businesses into a limited company you had better consult a book on joint-stock companies, now published by Wilson, Royal Exchange, at 1s. 6d. The registration fee on a capital of 1,000l. is 2l., and the stamp duty 1l. The notification to people you deal with is the word "Limited," which you must append to every use of your company title.

23/32. *Weed-killer*.—It is quite legal for an unregistered person to transfer orders for arsenical weed-killer to you, but this must be a *bonâ-fide* transaction. It is you, not he, who must supply the stuff.

25/6. *Figure* asks if a chemist having a "Gibbey's" licence to sell spirits, &c., can open on Sundays. Is such a licence a six or seven days' licence?—[Under the Licensing Acts, six-day licences are only granted for the sale of intoxicating liquors to be consumed on the premises—not off. The holder of a retail licence is subject to "closing hours." The chemist's business may be carried on during closing hours if the part of the shop used for the sale of liquors is closed, or the case in which the liquors are kept is shut up and locked. It is as well to bear in mind that the sale of intoxicating liquors on Sunday would probably cause opposition to the renewal of your justices' licence.]

19/33. *Nemo* asks if a "chloroform hair-stimulant" put up by an unqualified person is liable [to medicine-stamp duty, we presume is meant]. The preparation described would not be liable to stamp-duty, whether the person who put it up is qualified or not. If the preparation contains an appreciable quantity of chloroform it seems that the seller must be a qualified chemist, and must comply with the regulations for the sale of poisons.

27/69. *Cortex*.—The Treasury have seemed to carefully avoid raising any question which would bring one of these proprietary medicines within the first part of the schedule. It would be possible to argue that morphia, as a "poisonous vegetable alkaloid," brings a medicine within Part I., but such an interference with trade would be very objectionable, and it is not for chemists to initiate it.

27/5. *Phenol*.—In our opinion the sample of sugar you sent is not Demerara. If you can prove that you expressly bought it as such, and can satisfy a Court that the article is not what it was sold as, you have a clear claim for compensation. The wholesale dealer's defence that he himself bought it [under the description of what he sold it to you for] will not avail him. As to the exact course to take, and

the evidence that would be required, you had better consult a lawyer.

26/58. *Druggist*.—There is certainly nothing to prevent the same person practising both as a chemist and as a dentist at the same time, if his name is on both registers. We cannot discover any legal reason why such a person should not give the necessary certificate of pupillage to a youth who had been with him for three years after his Preliminary examination, for both dental and pharmaceutical boards of examiners. The master must be able to say in each case that the pupil has been practising the art indicated. You had better ask the Registrar of each board if any objection to the course you have indicated would be raised.

23/71. *J. E. B.*—An unregistered person has no right to style himself either wholesale druggist, manufacturing chemist, or analytical chemist. But if he is *bonâ-fide* either such a one, it is not the practice of the Pharmaceutical Council to interfere. Any misleading use of either title, would, however, very properly lead to a penalty.

Tabella.—In reference to a reply inserted in this column last week as to this title, Messrs. Hookin, Wilson & Co. write to say that they have used the word for their make of tablets for nearly four years.

29/70. *Radix*.—You can use a trade-mark without registering it, and you may call it "trade-mark," but not "registered." Of course, if in doing so you infringe anyone else's registered mark, you render yourself liable to an action; and if the mark be a registrable one you cannot maintain an action on it until you have registered it.

30/36. *X. Y. Z.*—The expression "Not Pharmacopœia strength" on a seidlitz-powder label would probably be a good defence in the event of a prosecution; but to be quite safe you must draw the attention of the purchaser to the fact before the purchase is completed.

MISCELLANEOUS INQUIRIES.

Inquirers will please read the "Memoranda for Correspondents."

A list of "Books for Chemists" is given in *THE CHEMISTS' AND DRUGGISTS' DIARY*, p. 317.

For all particulars regarding Educational and Examination matters refer to our issue of September 19, 1891.

Replies to queries are inserted according to the space open in any week, and insertion on any specific date cannot be guaranteed.

Back numbers of our weekly issue, containing formulae, &c., occasionally referred to in answers, can be obtained from the Publisher at 4d. each.

20/32. Dr. Herschell's manual on "Dyspepsia," was reviewed in this journal on January 16, 1892. It is published by Baillière & Co. at 3s. 6d.

23/47. *A. B.*—The best thing for threadworms, if san-tonin has failed, is a mixture of liquor ferri perbor, ʒss.; inf. quassia to ʒx. Half a wineglassful of this to be injected into the bowel every morning.

23/49. *Medicus*.—From 2s. to 5s. per hour is the fee which medical students generally pay for private coaching. You should require at least five guineas for the two months' instruction.

24/16. *York*.—As we feared, it is impossible to entirely remove the permanent hardness with the softener. See Messrs. Archbutt and Deely's paper in *THE CHEMIST AND DRUGGIST*, May 9, 1891, page 651.

23/55. *Complexion*.—Benzoin Lotion for the face and hands.—This may be composed as follows:—

Tr. benzoini simpl. ..	..	..	..	3viij.
Glycerini ..	..	..	..	3ss.
Aq. rose ad ..	..	..	..	3viij.

Mix the glycerine with the rose-water, and pour the tincture into it in a thin stream through a paper funnel. Give one shake.

23/58. *Black Oil*.—See page 324 of the current volume. Madder is an astringent, and acts as such on cattle.

23/60. *Parrish*.—See our issue of February 28, 1891, p. 322, for a good working formula for Parrish's syrup.

23/63. *Jean*.—You can remove the colour from tincture of tonka bean by filtration through animal charcoal. Preferably by distillation.

24/40. *A. E. B.*—We would filter the mixture.

16/40. *W. R. H.*—Beard on "Nervous Diseases" (Sampson Low, 9s.).

21/56. *J. O. W.*—The British Pharmacopœia is published by Messrs. Spottiswoode & Co. at 6s., and the Additions at 1s. Such books can be supplied from this office, carriage free, if desired, by remitting the publishers' price.

20/62. *X. Y.*—Pilocarpine is useless as a Hair-dye. Someone who took pilocarpine as a medicine happened to get a fine crop of new dark hair after it, where formerly a thin and greyish covering flourished. Upon this the reputation of pilocarpine is based. We recently examined a popular preparation, which we found to contain pilocarpine, the composition being as set forth in our issue of March 13, page 431. By hypsulphite wash we presume that you mean the one with lead as a basis, hypsulphurous acid of itself not being a dye. To make the wash dissolve 2 drachms of lead acetate in 3 oz. of water, and add to it a solution of sodium hypsulphite (1 in 3) until the precipitate formed is redissolved. Make up to 8 oz. with perfumed water, and filter through asbestos. This is to be used like the common sulphur hair-restorer.

20/39. *Poroplastic*.—Mechanics is no longer required of medical students. See the last Educational number. The preliminary R.C.S.I. certificate is recognised in England by the General Medical Council as well as in Ireland.

23/2. *Label*.—Varnish with a thin resin varnish.

27/14. *A. H.*—The quantity of hydroquinone for formula A, page 671, is 1 gramme. This is given in all our copies.

26/28. *Æthusa Cynapium*.—(1) Communicate with Messrs. Wills & Wootton or Messrs. Evans, Sons & Co. regarding mounted plants. (2) Directions for mounting have frequently been printed in this journal, but for very full particulars you may consult Oliver's "Elementary Botany" (Macmillan, 4s. 6d.) or Holmes's "Botanical Note-Book" (T. Christy & Co., 3s. 6d.)

25/4. *Tooth-cement*.—(1) We printed a good formula in our issue of August 23, 1891, p. 343. (2) We have no formula for a liquid depilatory. See September 12, 1891, p. 422.

25/37. *Liquidus*.—See the DIARY Book-list, p. 323.

40/25. *W. O. S.*—In addition to the formula for Glycerine and Cucumber in the number which we have sent you, the following may be quoted as a new style (*Lait de Concombre*), which is recommended in Germany:—

Poly. gum. acacie ..	..	..	gr. cl.
Ol. sesumi ..	..	..	5vi.
Aque ..	..	..	5iv.

Mix the oil and the gum intimately in a mortar, then add the water, and stir diligently until the whole is perfectly incorporated. Next add—
Aq. rose 5viij.

Transfer to a bottle, shake, and add the following:—

Aq. coloniensis ..	..	..	3i.
Spt. æther. nitrosi ..	..	..	3j.
Spt. camphoræ ..	..	..	3i.
Tr. benzoin. simp. ..	..	..	5ss.

Mix well.

It will be observed that this preparation contains no glycerine.

28/21. *H. C.*—Your Pharmacopœia is a copy of the third London Pharmacopœia, compiled by the Royal College of Physicians. The frontispiece and title-page are wanting. It was published in 1682, and there were two earlier imprints of the same Pharmacopœia—viz., 1677 and 1678. The first Pharmacopœia was published in 1618. It is interesting to note that "Joannes Atfield" has a place amongst those who were responsible for the production of your Pharmacopœia, and that at the present date, 1892, a John Atfield is the editor of our national Pharmacopœia—another proof of the doctrine of heredity, we suppose. Other names in the preface are found in the front rank of present-day medicine and surgery or pharmacy. There are two "Clarks" (Henricus and Josias), for the one (Sir Andrew Clark) now President of the College; a Frasier, a Paget, a Wolfe, a Frankland, a Gviliemus Warner, a Carter, &c. The value of your copy is considerably discounted by the want of the title-page, and the cut edges; but it is difficult to name any price for such books. Put any value you like upon it and keep it. We are unable to trace the written names.

29/46. *Indigestion*.—See page 499, April 2 issue, for a formula for pepsine wine. The preparation, you will notice, is non-Exciseable, and in our opinion by far too acid. You can obtain a very good wine sufficiently strong pectically, by using half the quantity of pepsine, 5iss. of dilute hydrochloric acid, and the other ingredients as stated in Mr. Clark's formula.

24/22. *Laboratory*.—The astringency of sherry depends upon the amount of tannin which it contains, and that is derived from the cask. You can judge from that the value of the wine as an astringent.

25/70. *F. W.*—Two ounces is the quantity in the original formula. Do you find that excessively strong?

25/45. *Gallus*.—Coal-tar dyes, we understand, but which we are unable to say.

23/36. *L. & C.* (Darjeeling).—The information you give is too meagre. The substance looks more like a dung than anything else.

24/59. *Dens*.—There is an article entitled "Dentistry for Druggists" in THE CHEMISTS' AND DRUGGISTS' DIARY, 1890, which gives just that kind of information which you desire. Perhaps you could get a copy of this through our Exchange Column, if you have not one. If you can conveniently attend a dental hospital you should do so. You are not entitled to call yourself a dentist or any other title which implies that you are qualified under the Dentists Act, but that Act does not prevent you from performing dental operations.

THE NEW DRUGGIST'S LABEL CABINET

(PATENTED).



H. POTHS & CO., 4 CREECHURCH LANE, LONDON, E.C.
LEADENHALL ST.,

Full Particulars on Application.

[2]

CRYSTAL PALACE JOHN BONDS GOLD MEDAL MARKING INK

Sale ever increasing at Home and Abroad, showing the appreciation by Trade and Public of this original and genuine Preparation.

GIVEN AWAY

And enclosed with every 6d. and 1s. Bottle and every 6d. and 1s. Marking Ink Pencil, a voucher entitling Purchasers to their Rubber Stamp. Name in full or Monogram, for Marking Linen or Paper.

WHOLESALE and EXPORT DEPOT:—75 SOUTHGATE ROAD, LONDON, N.

Send for Illustrated Price Lists and Samples for Travellers and Showrooms.

LARGEST SALE OF ANY MARKING INK IN THE WORLD.



WEDGWOOD ACID-PROOF MORTARS AND PESTLES.

ALSO MANUFACTURERS OF
Funnels, Evaporating Pans, Electric Battery Fittings, Bed Pans, Urinals, Medicine
Spoons, Physic Cups, Sick Feeders, Bleeding Basins, Medicine Measures, Eye Cups,
Inhalers, Nursery Lamps, Wall Tiles, &c.

PRICE LIST ON APPLICATION. SPECIAL QUOTATIONS FOR LARGE ORDERS.

Any Article not bearing the Stamped Trade Mark "WEDGWOOD" is not made by us.

JOSIAH WEDGWOOD & SONS, ETRUBIA, STOKE-ON-TRENT.
London Rooms—ST. ANDREW'S BUILDINGS, HOLBORN CIRCUS.

STRAIGHT QUESTIONS!!!

Do you use Soap containing Resin ?

Do you use Soap containing Methylated Spirit ?

Do you use Soap containing Sugar ?

RESIN,
METHYLATED SPIRIT,
And SUGAR,
Are bad for the SKIN.

**NOTE—VINOLIA SOAP IS NOT A TRANSPARENT SOAP, AND CONTAINS
NONE OF THE ABOVE.**

BLONDEAU ET CIE., RYLAND ROAD, LONDON, N.W.

CRESCENT



BRAND

BICARBONATE OF SODA,

REFINED AND RECRYSTALLIZED.

PURE AND CHEAP:

ANALYSIS.

Bicarbonate of Soda	---	---	---	---	---	97.20
Mono Carbonate of Soda	---	---	---	---	---	1.90
Sulphate of Soda	---	---	---	---	---	trace
Chloride of Sodium	---	---	---	---	---	.035
Moisture	---	---	---	---	---	.82
Insoluble	---	---	---	---	---	nil

PURE ALKALI,

GUARANTEED 58 DEGREES.

EQUAL TO 98 PER CENT. OF CARBONATE OF SODA.

Most economical form of Soda for the use of Printers,
Bleachers, Dyers; Glass, Paper, and Soap Makers.

SODA CRYSTALS

OF THE FINEST QUALITY.

BRUNNER, MOND & CO., LIM.

Manufacturers of Soda by the Ammonia Process

NORTHWICH, CHESHIRE.

THE

“STANDARD OF QUALITY”

ESSENTIAL OILS

MANUFACTURED OR SELECTED BY

DODGE & OLCOTT,

NEW YORK, U. S. A.

ESTABLISHED 1798.

OILS BAY, CARAWAY, CLOVES, CUBEBS, PEPPERMINT, SANDAL,
SASSAFRAS, SPEARMINT, TANSY, WINTERGREEN,
WORMWOOD AND MANY OTHERS.

AGENTS FOR THE UNITED KINGDOM—

ASHMORE & SON,

AGENT FOR THE CONTINENT OF EUROPE—

CHAS. WESTPHAL,

195 Upper Thames Street,

London, E.C.

6 MINCING LANE,

London, E.C.

■ An Original Case of GAYETTY'S PAPER contains 50 Packets, each Packet 500 Sheets.

GAYETTY'S MEDICATED PAPER.

CAUTION!

The original and only genuine Gayetty's Medicated Paper is prepared by B. T. Hoogland's Sons, New York, and has a facsimile signature of the inventor, Jos. C. Gayetty, and B. T. Hoogland, upon every package.

Every sheet of the genuine paper has the water-mark of Gayetty's Paper woven in the sheet, and when held to the light can be seen. Any infringement of the Trade-mark and invention will be vigorously prosecuted. The original Gayetty's Paper was invented and introduced to the public by Joseph C. Gayetty in the year 1857.

B. T. HOOGLAND'S SONS, Sole Proprietors, NEW YORK, U.S.

British Depot — 46 HOLBORN VIADUCT, LONDON, E.C.

LOFTHOUSE & SALTMER, MANUFACTURING CHEMISTS, WHOLESALE AND EXPORT DRUG MERCHANTS, HULL.

Manufacturers of all Pharmaceutical Preparations on the best and most improved principles. Quotations on Application

DEALERS IN PURE CHEMICALS

For Medicinal, Photographic, and Commercial purposes.

Importers of Cod Liver, Castor, and Olive Oils; Extra Super Essence of Lemon and Bergamot, Otto de Rose, and all



Essential Oils; Valentia Saffron; Vanillas; Fruit Essences; Carmine, Aniline Dyes; Bees' Wax, &c., &c.

LOFTHOUSE & SALTMER, HULL.

WHOLESALE AND EXPORT DRUG MERCHANTS, DRUG GRINDERS, & DRYSALTERS.

SPECIAL AGENTS FOR
SICILIAN SUBLIMED SULPHUR,
in 2-cwt. bags and casks; and
ROLL SULPHUR, in 3-cwt. casks.
Most favourable quotations to Wholesale Dealers on application.

Special quotations for Grinding Drugs;
also for ANISEEDS, CARAWAYS, FENUGREEK, GENTIAN, GRAN. PARAD., &c., in Powder.

PURE CRUSHED POULTICE-LINSEED.
"CROWN" BRAND.
Carefully prepared and guaranteed
Genuine. 16s. 6d. per cwt. net, in
Hull. Write for Samples.

ESTABLISHED 1813.

CLAY, DOD & COMPANY,

WHOLESALE AND EXPORT DRUGGISTS,

52 ST. ANNE STREET, LIVERPOOL.

Address for Telegrams—"CLAY LIVERPOOL."

Telephone No. 1192.

Mills and Laboratories—WAKEFIELD STREET.

CLAY'S LAVENDER WATER.

No. 1.—Distilled from English Flowers, 6/- per lb.; Winch., 5/6. No. 2.—Very Choice, 4/3 per lb.; Winch., 3/9.

Manufacturers of all descriptions of

PHARMACEUTICAL PREPARATIONS, COATED TASTELESS PILLS.

POWDERS GROUND IN OWN MILLS. PURITY GUARANTEED.

Samples free on application. Special Quotation to Cash or Large Buyers. Monthly Priced List forwarded on receipt of business card

BITUMINOL, OR VASELINE SUBSTITUTE.

Raw Beef-juice is raw Beef-juice, or fluid muscle.

There is no doubting this fact. At the same time it is, perhaps, as well occasionally to remind our readers of the various uses Caffyn's Liquor Carnis (Beef-juice in solution) and Malto-Carnis (Beef-juice, Malt, and Cocoa) have been put to in actual practice during the past five or six years, and the subjoined notes are taken from letters that have reached our office.

L. C. C.

Disease	Doctor	City
Infantile Debility	Craven, J. P. ...	Thurso
Enteric Fever	Dodd, J. ...	Prestwich
Gastric Catarrh and Portal Congestion	Wigglesworth, V.	Southport
Hæmophilia and Bronchitis ...	Jardiner, J. L. ...	Capel
Bright's Disease and Gastritis	Walsh - Davidson	Aspull Wigan
Influenza	Sykes, J. ...	Dewsbury
Prostration	Russell, A. ...	Harrogate
Fever	Powell, G. ...	Dublin
Diarrhoea... ..	Allen, M. S. ...	Dudley

*1. CHILD INANITION (MARASMUS).—No food for eight days; sinking; recovered in three days, sitting up at the table and eating rice pudding.

2. SEVERAL CASES OF QUINSY, with great difficulty in swallowing. Strength kept up by Liquor Carnis (concentrated nourishment).

3. CASE OF APOPLEXY, complicated with bronchitis. Could not swallow the smallest quantity of nourishment. Kept alive on Liquor Carnis for several days; complete recovery; no paralysis.

4. CASE OF STRANGULATION OF THE BOWELS.—Severe vomiting. Iced champagne and everything rejected with the exception of Liquor Carnis. Patient alive and improving.

5. CASE OF SENILE DEBILITY.—Recovery with Liquor Carnis.

6. CASE OF INCIPIENT PHTHISIS.—Has been taking Liquor Carnis for weeks; likes it, and finds it gives relief to the cough.

7. SEVERAL CASES OF CONSUMPTION OF THE BOWELS have derived great benefit from Liquor Carnis.

8. CASE OF PHTHISIS PULMONALIS.—Improving with Liquor Carnis; feels stronger.

W. H. WRIGHT, L.R.C.P.I. and L.M., M.R.C.S., Eng, L.S.A.,
Medical Officer of Health; Medallist in Medicine, Surgery,
Anatomy, Physiology, Chemistry, &c.

Disease	Doctor	City
Cancer of the Pylorus	McCann, J. G. ...	Liverpool
Melancholia; Marasmus	Macdowell ...	Carlton Asylum
Intestinal Cancer	Hurley, J. ...	Bath
Gastric Ulcer	Beale, G. B. ...	South Tottenham
Impaired Digestion	Brabazon, A. B. ...	Bath
Dyspepsia and Anæmia	Wood, A. H. ...	Oxford Street
Stricture of the Oesophagus ...	Higgins, G. H. ...	W. Kensington Pk.
Strangulated Femoral Hernia ...	Woolcombe ...	Plymouth
Ulcer of Stomach	Hargreaves, M. K.	Cavendish Square

We might go on quoting, but space does not permit.

NURSING.

"It seems to be getting the custom for women not to nurse their own babies, but surely such a custom would be a most unnatural one, and one which should not be in any way encouraged. The struggles of life, troubles, and other causes, it is true, often deprive mothers of what would indeed be to them a privilege and a labour of love. But other women prefer the calls of society to the calls of nature, and thus the number of bottle-babies is increased. With all these cases we have nothing to do at present, but turn rather to help those who are feeding their own infants. Diet is, of course, of very great importance; it should be abundant, simple, and nutritious, and all rich and stimulating articles of food should be avoided. A very excellent preparation for use at this time is *Caffyn's Malto Carnis, which contains a large amount of nourishment stored in a very small space. It has all the properties of a perfect food, as well as the stimulating properties found also in beef-tea and the various extracts of meat. It may be eaten cold, or taken hot as beef-tea. It agrees very well with the baby; and, in fact, when the time comes for weaning the child, we would strongly advise that a similar preparation, Caffyn's Liquor Carnis, be still administered in the milk, as it strengthens the child, supplying it with an easily-digested food, and preventing rickets and ailments of that nature. In addition to good food, a nursing woman should be particular in taking a moderate amount of exercise; the more the mother and child are in the open air, if the weather be reasonably fine, the better it is for both."—*Excerpt.*

* "Caffyn's Malto-Carnis consists of two-thirds (66 per cent.) of Caffyn's Liquor Carnis, 'uncooked juice of beef,' in combination with Extract of Malt and Cocoa. Dyspeptic persons who have been recommended to eschew tea would do well to give Caffyn's Malto-Carnis a trial, and in other and similar diseased conditions the preparation will doubtless prove useful."—*The Medical Press.*

DUNCAN, FLOCKHART & CO.

Wholesale and Export Druggists,

EDINBURGH.

CHLOROFORM

(DUNCAN'S).

PREPARED FROM PURE AND METHYLATED SPIRIT.

Also CHLOROFORM (BLUE LABEL).

Put up in all sizes of bottles. A strap with Name and Trade Mark of the Firm is placed over the stopper of each bottle. For Export, in stoppered bottles, securely luted, and in hermetically sealed flasks when required.

N.B.—We guarantee all the above CHLOROFORMS to be PURE CHLOROFORM, answering all the tests of the British Pharmacopœia.

Schacht's Preparations.

SCHACHT'S LIQUOR BISMUTHI.

Absolutely pure. The original preparation, invented and introduced to medicine by Mr. Schacht in 1855. Its distinct superiority is universally admitted. In $\frac{1}{2}$ lb., 1 lb., 2 lb., and 5 lb. bottles. Dose: 1 drachm diluted. When ordering, please to specify "SCHACHT'S."

SCHACHT'S LIQ. BISMUTHI SEDATIVUS.

Contains pure Bismuth and *Pepsina Liquida* in combination with sedatives. A formula most serviceable in the treatment of gastric pain. In 4 oz., $\frac{1}{2}$ lb., and 1 lb. bottles.

SCHACHT'S SYR. CINCHONÆ ALCOHOLICUS.

A standard preparation, of definite alkaloidal strength, containing the entire medicinal properties of the finest Cinchona Bark. It is, in fact, *Bark minus the woody fibre*, and its efficiency has been proved by careful medical enquiry. Dose: Ten to sixty drops.

SCHACHT'S PEPSINA LIQUIDA (REGISTERED TITLE).

Fluid pepsine of extraordinary activity—tasteless, odourless, attractive to patients, and reasonable in price. Every teaspoonful when tested by the official B.P. process is guaranteed to effect the solution of 1,000 grains of albumen. Peptic power is the only test of value. Most of the ferrid and repulsive dry Pepsines have proved worthless. In 4 oz. bottles, 2s. 6d. each; and larger sizes for dispensing at a choperrate.

SCHACHT'S PEPSINA LIQUIDA C. BISMUTHO.

Each drachm contains in a concentrated form, besides the fluid pepsine a full dose of Schacht's Liquor Bismuthi. Dose: One drachm. In $\frac{1}{2}$ lb. and 1 lb. bottles.

N.B.—Peps. Liq. c. Bismutho Co. contains, in addition, one gr. soluble Euconymin in each drachm.

SCHACHT'S PEPSINA LIQUIDA C. EUONYMIN.

Each drachm contains one grain of soluble Euconymin. Dose: One drachm. For dispensing $\frac{1}{2}$ lb. and 1 lb. bottles.

SCHACHT'S LIQ. PODOPHYLLI C. BISMUTHO.

A perfect solution of Podophyllin, containing $\frac{1}{2}$ gr. in each drachm.

SCHACHT'S LIQUOR CASCARÆ DULCIS.

A pleasant and active form of Cascara Sagrada. Dose: One to three teaspoonfuls diluted. In 4 oz., $\frac{1}{2}$ lb. and 1 lb. bottles.

SCHACHT'S INFALLIBLE RENNET.

An entirely new Essence, perfectly reliable, for the coagulation of Milk, and the production of Junkets and Curds and Whey. It is a preparation of the most wholesome nature, that contains no salt, and has no special taste, smell, or colour. In large bottles at 1s. of all Chemists. This Essence keeps well in any climate.

The above Preparations can be procured from Messrs. Barclay & Sons, W. Edwards & Son, and the Wholesale Druggists; or direct by post from

GILES, SCHACHT & Co., Clifton, Bristol.

RICHARDSON'S

IMPROVED

FLEXIBLE CAPSULES.

We beg to direct particular attention to the fact that these capsules are manufactured in our own Laboratories and have the following advantages, viz. :—

1. Each Capsule is guaranteed to contain the exact quantity stated.
2. The purest Drugs only are used.
3. The covering being very thin, size is reduced to a minimum.
4. Being prepared by a special process, leakage of the contents is entirely obviated.
5. They are warranted perfectly and rapidly soluble.

The following is a list, with prices, of those most in use, but Capsules containing other ingredients can be prepared to order, as desired.

	IN BOXES CONTAINING			
	25	50	100	1,000
1. Acid. Carbolic., gr. 1 each	10d.	1/3	2/3	18/-
2. Bals. Copaibæ, min. 10 "	6d.	10d.	1/6	10/6
3. Cascara, each Capsule, min. 30 of Ext. Cascara Sag. Liq. "	8d.	1/3	2/-	15/-
4. Carbo. Ligni, purified "	8d.	1/3	2/-	—
5. Creasotum, min. 1 "	6d.	10d.	1/6	10/6
6. Ext. Filicis Liq., min. 5 "	9d.	1/4	2/6	20/-
7. Ichthyol Ammon., min. 5 "	1/3	2/-	3/6	—
8. Ol. Ricini Opt., min. 15 "	6d.	10d.	1/6	12/-
9. Ol. Jecoris Aselli, min. 15 "	6d.	10d.	1/6	12/-
10. Ol. Santal Flav. Ang., min. 10 "	1/9	3/-	5/-	40/-
11. Ol. Terebinthinæ, Rect., min. 10 "	6d.	10d.	1/6	12/-
12. Ol. Copaibæ, min. 5 "	6d.	10d.	1/6	12/-
13. Ol. Chaulmoogra, min. 5 "	9d.	1/4	2/6	20/-
14. Pil. Blaud. No. 1, each Capsule =5 gr. Pil. Blaud. "	6d.	9d.	1/3	10/-
15. Pil. Blaud. No. 2, each Capsule =10 gr. Pil. Blaud. "	8d.	1/-	1/9	14/-
16. Pil. Blaud. No. 3, each Capsule =15 gr. Pil. Blaud. "	10d.	1/3	2/3	18/-
17. Pil. Blaud. c. Arsenic, gr. 1-100th "	8d.	1/-	1/8	12/-
18. Pix Liquida, min. 5 "	6d.	10d.	1/6	12/-
19. Quininæ Sulph., gr. 3 "	8d.	1/3	2/3	15/-
20. Syr. Eastonii, each Capsule equivalent to 30 min. "	9d.	1/4	2/6	20/-
21. Terebene, purified, min. 5 "	6d.	10d.	1/6	12/-

JOHN RICHARDSON & CO., LEICESTER, LIMITED.

BOOT'S PURE DRUG CO., LIM.

DISPENSING AND FAMILY CHEMISTS,

PATENT MEDICINE VENDORS & DEALERS IN MEDICINAL WATERS,

Having some twenty branches in NOTTINGHAM, SHEFFIELD, LINCOLN, DERBY, GRIMSBY, ILKESTON, GRANTHAM and BURTON-ON-TRENT, have exceptional opportunities of bringing Proprietary Articles before the public, and they will be glad to take up special agencies for articles of sterling merit where the proprietors are willing to meet their efforts to make a push of the same. Careful supervision of the distribution of advertising matter will be undertaken. Correspondence invited.

JESSE BOOT, Managing Director, Island St., NOTTINGHAM.

SPECIALITIES.

Castor Oil.	Camphor.	Albumen.	Ess. of Lemon.
Almond Oil.	Glycerine.	Herbs & Extracts.	Gums.
Olive Oil.	Lithia Salts.	Insect Powder.	Perfumes.
Cod-liver Oil.	Tartar Emetic.	Mercurials.	American Cotton Oil, etc.
Acetic Acid.	Castile Soap.	Camomiles.	
Tartaric Acid.	Pepsin, P.B.		
Phosphoric Acid.			
Salicylic Acid.			

COMMISSION MERCHANTS. **IMPORTERS-EXPORTERS.**

FURST BROS.

LONDON, E.C., 17 Philpot Lane; and NEW YORK, 2 & 4 Stone Street.

SAMPLES AND PRICES ON APPLICATION.

We only supply goods direct from Manufacturers personally known to ourselves. We can consequently vouch for the purity of the articles we sell.

CORRESPONDENCE SOLICITED.

CUMMINGS'



CYGNET BRAND

EUCALYPTUS OIL,

Distilled from the leaves of Eucalyptus CNEORIFOLIA, formerly considered a sub-variety of *E. Oleosa*, but now classed as a distinct variety.

The Trade are invited to test this carefully prepared Oil, which since its recent introduction from Australia has won the unqualified approval of the leading British, American, and Continental Authorities. Its purity, pleasant perfume, the unprecedentedly large percentage of crystallizable Eucalyptol it contains, and other good qualities, are deservedly gaining the preference of buyers.

Samples and Quotations on Application.

Sole Consignees—Wholesale only—

J. W. DRYSDALE & CO.

8 CREECHURCH LANE, LONDON, E.C.

CHARLES DELACRE & CIE.

(Pharmaciens de 1 classe),

WHOLESALE AND RETAIL CHEMISTS AND DRUGGISTS.

CH. DELACRE, PHARMACIEN. ESTABLISHED 1853.
AMB. DELACRE, PHARMACIEN.

Montagne de la Cour, Brussels.

GENERAL AGENTS

For BELGIUM and HOLLAND for [2]

MESSRS. BURROUGHS, WELLCOME & CO.'S

"Tabloids" and other Productions.

Chemists will find HENSON'S

FLUIDE-COCA AND CUCA-CHOCOLATE

For Cyclists, Travellers, Invalids, &c., very taking accessories; they interfere with no other lines, and are not supplied to cutters. **FLUIDE-COCA** is a concentrated non-alcoholic Extract of fresh Coca leaves, freed from inert wax, which makes the ordinary Extracts and Elixirs so objectionable and indigestible.

FLUIDE-COCA is miscible with wine or water, and enables patients to make a better Coca Wine than is usually sold, and Chemists to supply without a licence.

The winner from scratch of the Guy's Hospital 50 Miles Bicycle Road Race, 1891, writes:—"I attribute my success in this race entirely to the use of Henson's Coca Preparations."

To be obtained from Messrs. S. Maw, Son & Thompson, Edwards & Sons, J. Sanger & Sons, Barclay & Co. (Lim.), &c. **FLUIDE-COCA**, in oval flasks, 2s., 3s., 6d., and 10s. 6d. **CUCA CHOCOLATE** in boxes, 1s., 2s., 6d., and 10s. 6d.

Imported & Standardized by HENSON & CO., Beulah Hill, S.E.



"LLOYD'S LANADEPS"

"LLOYD'S LANADEPS"

Is Wool Fat, specially purified, and answering all the tests of the British Pharmacopoeia. It is very stable, and remains unchanged after boiling with alkalis. It contains 30 per cent. of water, and is capable of absorbing at least 50 per cent. more.

"LLOYD'S LANADEPS"

Is a most valuable preparation as a basis for Ointments. Its purity renders it unirritating to the skin, and it has a marvellous power of rapid absorption, thus making it particularly valuable for the application of such drugs as Mercurials, Iodide of Potassium, Iodoform, &c., &c. In the manufacture of Toilet Soaps, Pomades, Cold Cream, &c., &c., "LLOYD'S LANADEPS" is invaluable.

"LLOYD'S LANADEPS"

The chief hindrance to the general use of preparations of this character is the fact that the prices charged have been excessive "LLOYD'S LANADEPS" is put up in 1-lb. tins, price 1/4 each 7-lb. 1/2; 28-lb. 1/1; 56-lb. 1/- per lb.

"LLOYD'S LANADEPS"

(Anhydrous), in 1-lb. Tins, 2/- each.

"LLOYD'S UNG. LANADIPIIS"

Is a cheap Ointment basis made with "Lanadeps," but of a softer consistence.

In 1-lb. Tins, price 1/2 each; 7-lb. 1/-; 28-lb. 11d.; 56-lb. 10d. per lb.

"LLOYD'S LANADEPS" is prepared in our newly erected Steam Laboratory, under the most careful supervision. It may be obtained direct from the Makers—

T. HOWARD LLOYD & CO.

Wholesale and Manufacturing Chemists,

86 High Street and Town Hall Lane, LEICESTER.

A SAMPLE WILL BE FORWARDED FREE BY POST.

[2]

Principal: T. HOWARD LLOYD (eighteen years partner in the firm of JOHN RICHARDSON & CO., LEICESTER).

BARRON, HARVEYS & CO.

GILTSPUR STREET, LONDON, E.C.

Beg to inform their friends and the Trade generally that, having purchased the Business of

BARRON, SQUIRE & CO., BUSH LANE,
and also the various Formulæ of the Special Preparations of
JAMES BASS & SONS, HATTON GARDEN,
they are prepared to execute orders for the same, and pledge themselves to supply them in all their integrity.

Specimens of these Preparations have remained in the Museum of Kew Gardens during 28 years without deterioration.

THOMAS PALFREE, (ESTABLISHED 1872.)
SHOP-FITTER, SHOWCASE AND CABINET MAKER, &c.
HOCKLEY MILLS & CHERRY PLACE, NOTTINGHAM.

Special attention given to the fitting-up of Chemist and Drug Stores. Testimonials on application from leading Chemists in all parts of the Kingdom.

PLANS AND ESTIMATES SUPPLIED.

Telegram—
"LINT LIVERPOOL."

THE
LIVERPOOL PATENT LINT CO.,
MARK ST. MILLS,
NETHERFIELD ROAD NORTH,
LIVERPOOL.

LINT. MANUFACTURERS OF
LINTS,
ABSORBENT, AND CARDED
COTTON WOOLS,
ABSORBENT, OPEN WHITE, and GREY
BANDAGES,
SURGEON'S, AND CARBOLIZED
TOW.



**OKELL'S ORIGINAL
MONA BOUQUET**

(First introduced by the late JOSEPH OKELL.)

Registered Trade Mark, "DOUGLAS PIER."

The most popular and best-selling Perfume in the market.
RETAIL PRICES, 1/ 1/9, 3/6, 6/ 7/6, 10/6 per Bottle.
ALSO 3d. SAMPLE BOTTLES.

Shippers and Wholesale Buyers supplied on the best terms by
THOMAS WEST, 1185 & 1187 CHESTER ROAD, MANCHESTER.
STRETFORD,

Trade Mark.



Registered.

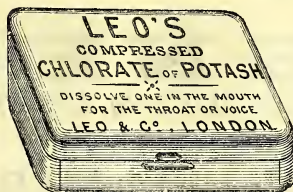
THE
ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH
12 PALL MALL EAST, LONDON, S.W.

SOLE AGENTS FOR
DR. WARLOMONT'S CALF VACCINE.

Tubes, 2s. each; Half Tubes, 1s. each. Pomade in vials, 6s.
HUMAN VACCINE, from healthy children only, microscopically examined and source quoted. Tubes two-thirds full, 1s. 6d. each; Tubes one-third full and lancet-charged points, 1s. each; Two-thirds, 1s. 1d. each. Eighteen charged Small Points, 6s. Tubes two-thirds full (same as those mentioned above, but without source), in quantities for export, 4s. per 100 Tubes. Pin-points uncharged, 1s. per dozen. Vaccine Ejectors, 1s. 3d. each, including postage. Vaccinations by appointment. F.O.O.s (including postage, and crossed London and Westminster Bank) with orders, payable to
EDWARD DARRK, Secretary.
Office hours, 10 to 4, Saturdays 10 to 2.

Ammon. Brom.
Ammon. Chlor.
Antifebrin
Antipyrin
Bismuth Subnit.
Chloralamid
Ipecac. Powd.
Ipecac. & Opium
Pepsine, B.P.
Phenacetin
Potass. Bicarb.
Potass. Brom.

When
ordering
specify
LEO'S.



They are
supplied by
all the
Wholesale
Houses.

COMPRESSED CHLORATE of POTASH. CHLORATE OF POTASH & BORAX.

Quotations given for large and small quantities.

Potass. Iodide
Quinine
Salicylate
Sulphur
Soda Bicarb.
Soda Mint
Soda Salicylate
Sulphur
Sulphur Compound
Sulphur
Voice (Potass. Chlor.)
Borax and Cocaine

LEO & CO.

8 CREECHURCH LANE, LONDON, E C.

SOLE AGENT,
FREDK. BOEHM, LONDON.

CHININFABRIK AUERBACH

(Dr. SEYFERTH),

SULPHATE OF QUININE

And all other Cinchona Preparations.

STOCK KEPT IN LONDON.

Certified by Professor Fresenius, of Wiesbaden, as equal to the best preparations of other marks.

THE FACTORY SUPPLIED THE
AMERICAN, RUSSIAN, and DUTCH GOVERNMENTS
DURING LAST SEASON.

DEUTSCHE GOLD AND SILBER SCHEIDE ANSTALT

(FORMALS ROSSLER),

FRANKFORT-ON-MAINE,

MANUFACTURERS OF CHEMICALS

For Pharmaceutical, Photographic, and
Technical Purposes.

SPECIALITIES.

NITRATE OF SILVER.

CHLORIDE OF GOLD.

CYANIDE OF POTASH.

PERMANGAN. OF POTASH.

CHROME ALUM.

ACETANILIDE.

SOLE AGENT,
FREDK. BOEHM, LONDON.

SMITH & SONS

WHOLESALE DRUGGISTS AND MANUFACTURING CHEMISTS,

44, 46, and 48 MAGDALEN STREET, NORWICH.

PURE CHEMICALS.

MANUFACTURERS

PHARMACEUTICAL

IMPORTERS OF ESS. LIMONIS



CRUDE DRUGS AND CHEMICALS.

NEW REMEDIES.

OF ALL

PREPARATIONS.

SUPER AND ALL ESSENTIAL OILS,

DEALERS IN DRUGGISTS' SUNDRIES AND SURGICAL APPLIANCES.

PRICES CURRENT ON APPLICATION.

TELEGRAMS—"SMITH NORWICH."

MAGNESIA

CARBONATE, CALCINED, AND HYDRATE.

PURE FLUID MAGNESIA.

THE WASHINGTON CHEMICAL CO., WASHINGTON, COUNTY DURHAM, ENGLAND.

"FOR THE BLOOD IS THE LIFE"



Trade Mark—"BLOOD MIXTURE."
(Registered No. 3275.)

The Celebrated CURE for
Scrofula, Scurvy, Eczema,
Blood and Skin Diseases,
and Sores of all kinds.

WHOLESALE OF ALL THE WHOLESALE HOUSES.

SOLE PROPRIETORS:
THE LINCOLN & MIDLAND COUNTIES
DRUG COMPANY, LINCOLN.

Counter Bills and Posters, with Name and Address,
also Show Cards, on application. Printed matter
supplied in any Language for Foreign Agents.

CAUTION.—The Proprietors will take immediate proceedings against all persons pirating their Trade Mark, "Blood Mixture," Labels, Wrappers, &c., or Advertisements, or in any way infringing their rights.



EXTRA HEAVY OVAL GLYCERINES.
Example: 4-oz. size, about 3 oz. liq.
content.

PANELLED FLATS.

Telegraphic Address—"FISH LONDON."

Telephone 1365.

IN STOCK IN TINTED & WHITE FLINT GLASS.

DELIVERED DIRECT FROM WORKS IN
FINEST AMBER TINT
AT SAME PRICES AS FOR WHITE GLASS.

JOHNSON & JØRGENSEN.

OFFICES AND SHOW ROOM—

5 Savage Gardens, Tower Hill, E.C.

Warehouse—WEST INDIA IMPORT DOCK, E.

GLASS BOTTLES

GOOD AND CHEAP.

From Stock
in London or
direct from
the Works.

THE NEW SHAPE FLATS, WITH ROUNDED EDGES, OR THE
ORDINARY SHAPE.

3 & 4 oz. } Plain or Graduated { 7s. 9d. per Gross.
6 & 8 oz. } " " " " { 8s. 9d. " "

CRYSTAL BLUE TINTED—HANDSOME COLOUR.

3 & 4 oz. } Plain or Graduated { 9s. 0d. per Gross.
6 & 8 oz. } " " " " { 10s. 0d. " "

WHITE MOULDED PHIALS.

1 oz., 3s. 9d.; 1½ oz., 4s. 6d.; 2 oz., 5s. 3d. per Gross.
PLAIN OR GRADUATED TEA SPOONS.

MINERAL WATER BOTTLES,

Plain or Stopped, at Lowest Market Prices.

I. ISAACS & CO., Glass Bottle Manufacturers,
25 Francis St., Tottenham Court Rd., LONDON.

Established 50 Years. Bankers—London and Westminster Bank.

46

KREAT - HALVIVA

The New Substitute for Quinine.

REDUCES TEMPERATURE, SUPPRESSES INFLUENZA,
SEA-SICKNESS, &c. CURES INDIGESTION.

One size only for Public use, for sale at 2s. 9d. a bottle.

One size only for Dispensing, 10-oz. Stopped Flats.

SPARKLING HALVIVA for sale at 5s. a dozen.

HALVIVA COMPANY, 4 Temple Chambers, LONDON.

TO THE WEED KILLER TRADE.

For destroying Weeds, Moss, &c., on Garden Walks, Carriage Drives, Roads, &c.

Special advantages which the sale of the "Acme" Weed Killer affords the Trade.

1. The "Acme" Weed Killer is used in the gardens and on the estates of the Gentry everywhere, and by Corporations and Burial Boards in Parks, Cemeteries, &c.
2. Our Retail Prices are such as will induce a ready sale, and we make no charge for 1 and 2 gallon tins.
3. We pay carriage on six 1-gall. tins, or on four 2-gall. tins, and on 10 galls. and upwards, in drums and casks, to any Station or Port in Great Britain.
4. Drums and casks are charged at cost price. Full price allowed when returned.

Trade and Export Terms on application.

RETAIL PRICES.—In 1 and 2 gallon tins, 2/- per gallon (tins included); in 5-gallon drums, 1/6 per gallon; 10, 15, and 20 gallons, 1/4 per gallon; in 40-gallon casks, 1/2½ per gallon.

TESTIMONIALS received from Mr. HEAD, Crystal Palace; Mr. IRWIN LYNCH, Cambridge Botanic Gardens; and others
THE "ACME" WEED KILLER, FOR CHEAPNESS & EFFICIENCY, HAS WON FOR ITSELF A NAME FAR ABOVE ALL OTHERS.

SOLE PROPRIETORS AND MANUFACTURERS—

THE ACME CHEMICAL CO., LIM., Tunbridge, Kent; & Carlton St., Bolton, Lancashire.

WHOLESALE AGENTS—London: BARCLAY & SONS, LIM., 95 Farringdon Street; EDWARDS & SON, Queen Victoria Street; BURGONE, BURBIDGE, CYRIAX & FARRIES, 16 Coleman Street; S. MAW, SON & THOMPSON, 7 to 12 Aldersgate Street; F. NEWBERRY & SONS, 1 King Edward Street, Newgate Street. York: RAIMES & CO. Newcastle-on-Tyne: ISMAY & CO. Edinburgh: RAIMES, CLARK & CO. Glasgow: W. & R. HATRICK & CO., 152 Renfield Street

GEORGE TREBLE & CO.

SHOP FITTERS & SHOW-CASE MAKERS,

Chemists waited upon in any part of the United Kingdom. Plans and Estimates supplied free of charge.

59 RHODES STREET HOLLOWAY, LONDON, N.

WEED KILLER



SELLS WELL. PAYS WELL.

PUT UP WITH CHEMIST'S OWN NAME ON LABEL.

HANDBILLS SUPPLIED WITH NAME AND ADDRESS FREE.

1 and 2 Gallon Tins. 5 and 10 Gallon Drums.
40 Gallon Casks.

WRITE FOR FULL PARTICULARS AND PRICES TO

W. BUTCHER & SON,
MANUFACTURING CHEMISTS,
BLACKHEATH, LONDON, S.E.

**STAPLES' Patent FLUID NON-POISONOUS
SHEEP DIP & CATTLE CLEANSER.
POISONOUS POWDER DIP**

(Warranted to remain dry, and not discolour Packages).

WEED DESTROYER.

DISINFECTING FLUID & POWDER.

STAPLES' PATENT SHEEP-DIPPING APPARATUS.

Staples' Patent Dips have an established reputation,
and are guaranteed to give satisfaction.
WRITE FOR FREE SAMPLE AND TESTIMONIALS.

STAPLES BROS. & CO., BRIGG, ENGLAND.

**WILSON'S
PATENT
STICKY FLY PAPERS**

ARE BEYOND ALL PRAISE.

From all Wholesale Houses, or direct from the
Maker,

**S. WILSON, FLY PAPER MANUFACTURER,
ST. HELEN'S, LANCASHIRE.**

PRICE 4/ PER GROSS, CARRIAGE PAID.

Shippers and Exporters, please apply for Special
Terms.

WILEY'S CHEMICAL ESSENCE
FOR
LAMENESS IN HORSES.

HANDBILLS, WITH NAME & ADDRESS, SUPPLIED GRATIS.

50 YEARS' UNBROKEN SUCCESS.

SOLE MAKER AND PROPRIETOR, FRANCIS E. ROOKLEDGE, CHEMIST, EASINGWOLD, YORK.

TO BE HAD OF USUAL WHOLESALE HOUSES.

WALKER, TROKE & CO.

WHOLESALE DRUGGISTS,

82 CITY ROAD,

LONDON, E.C.



SOLE MAKERS OF
**GABRIEL & TROKE'S
GELATINE CAPSULED
HORSEBALLS**

Alternative, Condition, Cordial, Cough,
Diuretic, Fever, Physis, Worm, Quinine
Tonic Balls (Registered 81,291).

QUOTATIONS & SAMPLES FREE ON APPLICATION.

GENUINE EMERY, EMERY CLOTH, AND BLACK LEAD.

JOHN OAKLEY & SONS,

MANUFACTURERS OF

Glass and Flint Paper, Emery and Glass Cloth; Emery, Black Lead, Emery Wheels,
Pumice, Putty Powder, Crocus, Urn Powder, Tripoli, Rouge, Plate Powder, Steel Polish,
Furniture Polish, Knife Boards, Brunswick and Berlin Black, &c.

OAKLEY'S WELLINGTON KNIFE POLISH

Prepared expressly for Oakley's and other Knife Boards, Buff Leather Boards, and all the Patent Knife Cleaning Machines,
Sold in Canisters with perforated Tops to prevent waste, at 1d., 2d., 3d., 6d., 1s., 2s. 6d., and 4s. each.

OAKLEY'S NON-MERCURIAL SILVERSMITH'S SOAP,

For Cleaning and Polishing Silver, Plate Glass, Marble, &c. Tablets, 6d. each.

OAKLEY'S "POLYBRILLIANT" (REGISTERED).

A Magic Pomade for Cleaning Brass, Copper, Tin, Pewter, Britannia Metal, &c. Never becomes dry and hard like other Metal Pastes.
Tins 1d., 2d., 3d., and 6d. each.

WELLINGTON BLOCK BLACK LEAD,

In 1d., 2d., and 4d. Blocks, and 1s. Boxes.

WELLINGTON EMERY & BLACK LEAD MILLS, Westminster Bridge Road, London, S.E.

Highest Award and Prize Medal, Philadelphia Exhibition, 1876; and Boston, 1883. Gold Medal, Crystal Palace, 1884.

REDUCTION IN PRICES.

THE DURAPLASTIC COATED HORSE BALL.

Elegant Veterinary
Pharmacy.



Elegant Veterinary
Pharmacy.

FLETCHER'S PATENT.

No. 4.—**Alterative Balls**, 2/ per doz.
R Aloes Barb. .. 1 1/2 dram 20/ Per gross
Antim. Tart. .. 1 dram
Saponis .. 2 drams
Mass. Commun. Q.S.

No. 22.—**Astrydine Balls**, 4/6 per doz.
R Pulv. Opil .. 1 dram 45/
Chloral. Hydrat. .. 1 dram
Ammon. Carb. .. 2 drams
Mass. Commun. Q.S.

No. 5.—**Astringent Balls**, 2/ per doz.
R Ext. Catechu .. 1 dram 20/
Pulv. Cinnamon .. 1 dram
Mass. Commun. Q.S.

No. 12.—**Condition Balls**, 2/ per doz.
R Aloes Barb. .. 1 1/2 dram 23/
Antim. Tart. .. 1 dram
Potass. Nit. .. 1 dram
Antim. Sulph. .. 1 dram
Pulv. Resina .. 1 dram
" Pip. Cayenne .. 1 scruple
" Gentian. .. 1 dram
Sapo. Mollis .. 1 dram
Theriacis, Q.S.

No. 23.—**Condition Balls**, 2/ per doz.
Formula as No. 12. Aloes omitted. 20/

No. 6.—**Cordial Balls**, 2/ per doz.
R Pulv. Zingib. .. 3 drams 20/
" Gentian. .. 3 drams
Theriacis, Q.S.

No. 7.—**Cough Balls**, 2/ per doz.
R Aloes Barb. .. 1 dram 20/
Pulv. Digitalis .. 1 dram
Potass. Nit. .. 2 drams
Mass. Commun. Q.S.

No. 15.—**Cough Balls**, 2/ per doz.
R Ext. Belladonna .. 1 dram 20/
Aloes Barb. .. 1 dram
Potass. Nit. .. 2 drams
Mass. Commun. Q.S.

No. 17.—**Cough Balls**, 2/ per doz.
R Ext. Belladonna .. 1 dram 20/
Camphore .. 1 dram
Pulv. Digitalis .. 1 dram
Potass. Nit. .. 2 drams
Mass. Commun. Q.S.

No. 21.—**Cough Balls (Chlorodyne)**
3/3 per doz.
R Chlorodynum .. 2 drams 33/
Camphore .. 1 dram
Mass. Commun. Q.S.

Maidenhead.
Dear Sirs,—I beg to say that the Duraplastic Ball supplied to me by your firm answer all the advantages claimed for them.

I am, yours faithfully,

J. F. SIMPSON, F.R.C.V.S.

Grantham Veterinary Infirmary.
I have much pleasure in certifying that I have used Wyley & Co.'s Patent Duraplastic Horse Balls for some considerable time. I have found them universally efficacious, pleasant to administer, quick in action, and in every way preferable to the old-fashioned paper-covered bolus of our forefathers.

BEN. H. RUSSELL, F.R.C.V.S.

Stratford-on-Avon.
Sirs,—I can testify to the thorough therapeutic action of your patent Duraplastic Balls, and I prefer them to the old-fashioned balls on account of their easiness to deliver to the patient, and also of their remaining of the proper consistency, which I consider most beneficial.

I am, Sirs, yours truly,

JNO. JAS. CROWHURST, M.R.C.V.S.L.

Hertford Street, Coventry.
Dear Sirs,—I think the Duraplastic Horse Ball a very good invention. They save me no end of trouble, and are always clean, keep well, and act satisfactorily. The Physic Balls I find very reliable. You asked me some time ago about some Physic Balls, and as I have not had occasion to blame any I have used for non-acting, I thought I would just mention the fact.

Yours faithfully,

WM. DALE, M.R.C.V.S.

From T. Blakeway & Son,
Veterinary Surgeons, Stourbridge.
Dear Sirs,—We should be obliged if you would kindly forward us at your earliest convenience five gross of your Patent Duraplastic Physic Balls. The coating of these balls we consider a very elegant preparation, and from its smoothness, coupled with the shape in which the balls themselves are made up, we find them particularly easy of administration, and the chances of their being coughed back are reduced to a minimum.

Faithfully yours,

JAMES BLAKEWAY.

West Bromwich.
Gentlemen,—I have been using your Duraplastic Horse Balls for several months, and am very pleased with them. I find that to a single-handed practitioner they are invaluable.

Yours truly,

HARVEY COLLETT, M.R.C.V.S.

No. 8.—**Diuretic Balls**, 1/9 doz.
R Pulv. Resin. .. 2 1/2 drams 18/
Potass. Nit. .. 2 1/2 drams
Sapo. Q.S.

9.—**Fever Balls**, 2/ doz.
R Antim. Tart. .. 1 1/2 dram 20/
Camphore .. 1 dram
Potass. Nit. .. 2 drams
Mass. Commun. Q.S.

No. 1.—**Physic Balls**, 2/ doz.
Aloes Barb. .. 4 drams 20/

No. 2.—**Physic Balls**, 2/6 doz.
Aloes Barb. .. 5 drams 25/

No. 3.—**Physic Balls**, 2/9 doz.
Aloes Barb. .. 6 drams 27

No. 18.—**Physic Balls**, 3/ doz.
Aloes Barb. .. 7 drams 30/

No. 19.—**Physic Balls**, 3/6 doz.
Aloes Barb. .. 8 drams 36/

No. 15.—**Stimulating Balls**, 2/ doz.
R Ammon. Carb. .. 2 drams 20/
Aloes Barb. .. 1 dram
Pulv. Gentian. .. 2 drams
" Zingib. .. 1 dram
Camphore .. 1 dram
Theriacis, Q.S.

No. 24.—**Stimulating Balls**, 2/ doz.
Formula as No. 15. Aloes omitted. 20/

No. 10.—**Tonic Balls**, 2/ doz.
R Ferri Sulph. Pur. .. 1 1/2 dram 20/
Pulv. Zingib. .. 1 dram
Ext. Gentian. .. 2 drams
Mass. Commun. Q.S.

No. 11.—**Tonic Balls**, 1/9 doz.
R Cupri Sulph. .. 1 dram 18/
Pulv. Zingib. .. 1 dram
Mass. Commun. Q.S.

No. 20.—**Tonic Balls (Quinine)**, 2/9 doz.

R Quinine Sulph. .. 1 scr. 27/
Ferri Sulph. Pur. .. 1 1/2 dram
Pulv. Zingib. .. 1 dram
Ext. Gentian. .. 2 drams
Mass. Commun. Q.S.

No. 13.—**Worm Balls**, 2/6 doz.
R Calomel .. 2 scr. 25/
Aloes Barb. .. 3 drams
Mass. Commun. Q.S.

No. 14.—**Worm Balls**, 5/ doz.
R Aloes Barb. .. 2 drams 50/
Ferri Sulph. .. 2 drams
Antim. Tart. .. 2 drams
Ol. Filicis Maris .. 1 dram
Syrup. Q.S.

These Balls are specially adapted for export: and their sale is steadily increasing abroad, in India, Australia, Egypt, &c.

PRIVATE FORMULÆ.—WYLEY (LIMITED) will be glad to prepare Patent Duraplastic Balls from private recipes or modifications of the Veterinary Pharmacopœia formulæ, also to model and coat any masses which may be entrusted to them. Arrangements can also be made to have the name of the Chemist upon each Ball if desired, upon orders of two gross of assorted Balls.

All Balls are packed in boxes of one dozen. Samples forwarded free on application.

PROPRIETORS AND SOLE MANUFACTURERS,

WYLEY LIMITED, COVENTRY

Branch House—52 Moor Street, BIRMINGHAM.

THE "STIPENDUM" STOPPER CO., LIM.

47 LAMB'S CONDUIT STREET, LONDON, W.C.,

Manufacture the following Specialities—

- "STIPENDUM" CORK STOPPERS, in all sizes.
- "STIPENDUM" CORK-LINED CAPS, for Pomade Bottles.
- "STIPENDUM" SCREW CAPS, for Pomade Bottles.
- "STIPENDUM" OPENERS, for Stoppered Aerated Water Bottles.

"STIPENDUM" GREASE-PROOF COVERED POTS

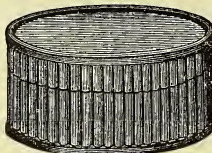
IN TERRA COTTA, CHOCOLATE, AND BLACK.

The Grease-Proof Covered Pots have perfectly fitting lids, are practically unbreakable, and the only article really answering the purpose intended.

The following Analytical Report should be noted by the trade:—

London, January 5, 1891.

"We have examined the two covered pots marked November 21, 1890, one containing strong nitrate of mercury ointment, and the other Iodine ointment, the object being to discover—(1) Whether the ingredients of which the pots are composed have in any way affected the ointments; (2) Whether the pots have been deteriorated by the action of the ointments.



We hereby certify that no trace of any of the ingredients of the pot can be discovered in either of the ointments, and further that the pots themselves were found not to have been acted on at all; and we further consider 'Stipendum' admirably adapted for such pharmaceutical preparations.

Signed, C. T. KINGZETT, F.I.C., F.O.S.
(Ex Vice-President Society of Public Analysts)
R. H. HARLAND, F.I.C., F.O.S.
(Public Analyst)."

To be had of all Druggists' Sundriesmen.

Wholesale only of the Company.

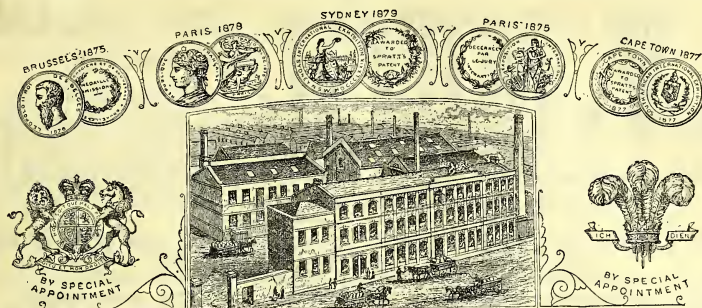


It is acknowledged by the Trade that THE "FLY CEMETERY"

Is the most saleable Fly Paper ever introduced. It is non-poisonous, and the enormous annual increase in the sale of it is positive proof of its popularity. Many Chemists sold more "Fly Cemeteries" last year than they ever did in their lives of all the other fly papers put together.

Samplers, Testimonials, and Price on application to
TUNBRIDGE & WRIGHT, READING.





MEMO FROM
SPRATT'S PATENT LIMITED
 MANUFACTURERS

Henry Street, **BERMONDSEY ST. LONDON.** 14th May, 1892.
 S.E.

IMPROVEMENTS.

POULTRY AND GAME REARING.

Gentlemen,

To meet the views of breeders, we now manufacture our Game Meal of three different grades—

Fine, Medium, and Coarse.

We have also introduced a

CHICKEN MEAL,

finer ground than our Poultry Meal, specially for rearing Chicks from the Shell.

Our prices for these grades are the same. Kindly draw your customers' attention to these, and to the important fact that our Meals are a Cooked Food. Write for Samples of all our articles, so much in demand just now for Rearing.

Yours faithfully,

SPRATTS PATENT LIMITED.

S. V. METH.

JONES & COMPANY
COPPERFIELD ROAD
LONDON, E.
LARGEST MAKERS IN THE KINGDOM.

We are prepared to supply METHYLATED SPIRIT in 5-gallon quantities at Lowest Prices.

REDUCTIONS TO LARGE BUYERS.
SAMPLES FREE.

BOORD & SON,

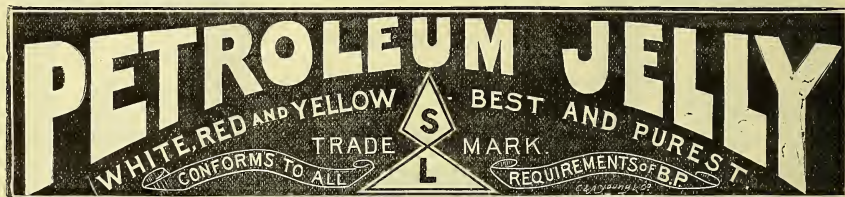
DISTILLERS, FOREIGN WINE AND SPIRIT MERCHANTS, AND METHYLATORS,
ALLHALLOWS' LANE, & BARTHOLOMEW CLOSE, LONDON, E.C.

Quotations for **S.V.R.** Methylated Spirit and Finish on application
FINEST ORANGE WINE FOR QUININE.

JAMES BURROUGH, S. V. R.

GALE ST., CHELSEA, S.W.
and Methylated Spirit
AT LOWEST PRICES.

WRITE FOR QUOTATIONS.



CHEAPER AND EQUAL TO VASELINE, AND PRONOUNCED BY THE MEDICAL PROFESSION TO BE UNSURPASSED.
Tins of all sizes, from 1 to 10 lbs.; Iron or Wood Kegs, $\frac{1}{2}$, $\frac{1}{4}$, and 1 cwt.; Barrels about 3 cwt., &c. Samples and prices on application, stating packages and quantities required, to the Manufacturers—
SNOWDON, SONS & CO., WEST FERRY ROAD, MILLWALL, LONDON, E.

AS A POLISH THE CLEANEST. BRIGHTEST, AND BEST.

PYN-KA

THE POLISHING TABLET (Unsurpassed). AWARDED GOLD MEDAL.

Cleans with a Brilliant Polish Brass, Copper, Silver, Gold, White and other Metal, Electroware, Glassware, and other domestic articles. For Restaurants, Hotels, Bars, and Biologists.

TESTIMONIAL FROM A LADY.—“Your ‘PYN-KA’ Sample is the best I have tried, and we shall use no other cleaning preparation in our house. It will, I am convinced, supersede all other Polishing Pastes.”

For Wholesale Terms apply to the Sole Vendors—

THE PYN-KA SYNDICATE, LIMITED, 41 LORD ST., LIVERPOOL.

CHEMISTS & DRUGGISTS, PERFUMERY BOTTLERS, ESSENCE BOTTLERS,

Should send for Samples of our Novel and
Attractive

Miniature Bottles

When filled, distributed, &c., become
RELIABLE ADVERTISING MEDIUM
And increase your sales.

BREFFITS'
83 UPPER THAMES STREET, LONDON.

EVERY CLASS AND DESCRIPTION
BOTTLES AND GLASSWARE.

WILLIAM TOOGOOD'S

WAREHOUSE AND SHOW ROOM,

BURLINGTON BUILDINGS,

HEDDON STREET, REGENT STREET, LONDON, W.

INFLUENZA SPECIAL.

Write for Samples at once.

TOOGOOD'S POCKET INHALER,

For Charging with Eucalyptus, Pinol, Carbolic Acid, &c. 5/- dozen.

TOOGOOD'S VAPORISATEUR,

For Diffusing the Vapour of Eucalyptus, Pinol, Carbolic Acid, &c. 3/6 dozen.

Dr. BELL'S

EUCALYPTUS ANTI-CATARRH SMELLING BOTTLE,

9/- dozen.

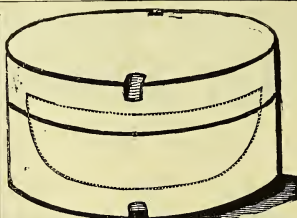
TOOGOOD'S

IMPROVED PATENT

EARTHENWARE

COVERED POTS

Are claimed to be the most perfect and convenient yet offered to the Trade.



Owing to the increasing demand for our Patent Pots, we have introduced a Special THIN Series for Dispensing.

These Pots are beautifully glazed and finished, and, being very light, are specially adapted for sending by post.

ORDINARY THICKNESS—

1 dr.	2 dr.	1	2	1	1 1/2	2	3	4	6	8 OUNCES.
1/6	1/6	1/6	1/8	1/10	2/	2/3	2/10	3/6	4/6	5/6 per doz.

THIN FOR DISPENSING—

1	1	1	1 1/2	2	3	4	6	8 OUNCES.
1/7	1/9	2/	2/2	2/5	3/	4/	5/	6/ per doz.

TOOGOOD'S PATENT BRONCHITIS AIR KETTLE,

51/- per dozen.

SOLE AGENT FOR DR. LEE'S STEAM DRAFT INHALERS.

SUPERFATTED MEDICINAL SOAPS

PREPARED FROM PRESCRIPTIONS AND UNDER THE CONSTANT CONTROL OF

Dr. MED. J. EICHHOFF, Senior Physician to the Wards for Skin and Venereal Diseases of the Elberfeld Hospital.

FIRST SERIES.

SUPERFATTED RESORCINE SALICYLIC SOAP.

In Parasitic Eczema, Seborrhoea Capitis.

SUPERFATTED RESORCINE SALICYLIC SULPHUR SOAP.

In Parasitic Eczema, Acne Vulgaris, Acne Rosacea.

SUPERFATTED RESORCINE SALICYLIC SULPHUR TAR SOAP.

In Psoriasis Vulgaris.

SUPERFATTED QUININE SOAP.

In mild cases of Mycosis, especially Pityriasis Versicolor.

SUPERFATTED IODOFORM SOAP.

For Chronic Ulcers, Venereal Bolls, &c., and also in the Massage Treatment of Small Tumours and Exudations.

SUPERFATTED HYDROXYLAMINE SOAP.

In Lupus, Psoriasis, Tinea Tonsurans and Parasitic Syphilis.

SUPERFATTED CREDLINE SOAP.

In Scabies, Impetigo Contagiosa, Intertrigo, Lupus.

SUPERFATTED ERGOTINE SOAP.

In Rosacea, Angiectasis, mild cases of Varix, and in the Massage Treatment of Migraine.

SUPERFATTED IODINE SOAP (READILY SOLUBLE).

For Small Tumours, Indolent Ulcers, Lupus, Parasitic Eczema, Syphilis, and Mycosis.

SUPERFATTED SALICYLIC CREOSOTE SOAP.

For Lupus.

SECOND SERIES.

SUPERFATTED MENTHOL SOAP.

In General and Local Pruritus (especially Genital and Anal).

SUPERFATTED SALOL SOAP.

In Parasitic Eczema, Psoriasis, Eczema, Marginatum and Mycosis.

c. F. "Dermatologische Studien," Second Series, Vol. I, for 1889, and also "Volkmann'sche Sammlung Klinischer Vorträge," New Series, IV. 1890.

Sole Manufacturer:—FERD. MULHENS, No. 4711, Glockengasse, Cologne-on-Rhine.

Under the constant supervision of Mr. J. BRASCHOS, of Cologne, Pharmaceutical Chemist.

Agent for the United Kingdom—R. J. REÜTER (from KROHN BROTHERS & CO.), 24 & 26 BASINGHALL STREET, LONDON, E.C.

SUPERFATTED ARISTOL SOAP.

In Psoriasis, Ulcus Cruris, Dermatomyomycosis, Syphilitic Gummata, Ulcerating Lupus.

SUPERFATTED SULPHUR CAMPHOR, PERUVIAN BALSAM SOAP.

In Acne Vulgaris and Seborrhoea of the Body or Face.

SUPERFATTED SALICYLIC ICHTHYOL SOAP.

In Acne Vulgaris, Acne Rosacea and Eczema; also in the Massage Treatment of cases of Articular and Muscular Rheumatism.

SUPERFATTED THYMOL SOAP.

Recommended as a Pure Hygienic Soap for daily use, especially for children.

SUPERFATTED RESORCINE SOAP.

Seborrhoea, Parasitic Eczema and Erythema.

SUPERFATTED ICHTHYOL TAR SOAP.

Dermatomyomycosis, Psoriasis, Chronic Palmar and Plantar Eczema.

SUPERFATTED MENTHOL EUCALYPTOL SOAP.

Urticaria, Pruritus, also in the Massage Treatment of Migraine, as well as a disinfecting soap for medical men, patients and their attendants (in infectious cases).

SUPERFATTED SALICYLIC SOAP.

SUPERFATTED SALICYLIC SULPHUR SOAP.

SUPERFATTED SALICYLIC SULPHUR TAR SOAP.

For the same cases as in the three first-mentioned soaps.

SUPERFATTED SUBLIMATE SOAP, 1/2 AND 1 %.

As Disinfecting Soap.

SUPERFATTED BENZOIC SOAP.

A Sanitary Toilet Soap for Intertrigo, Scurf, &c.

SUPERFATTED PINE-NEEDLE EXTRACT SOAP.

In Massage Treatment of Rheumatic Affections and Parasitic Skin Diseases, also as a Disinfecting Soap for medical men, patients and attendants.

SUPERFATTED THIOI SOAP, 5 % AND 10 %.

In Parasitic Eczema Mycosis, Acne Vulgaris, Acne Rosacea.

"c. F. "Dermatologische Studien," Second Series, Vol. I, for 1889, and also "Volkmann'sche Sammlung Klinischer Vorträge," New Series, IV. 1890.



WHITE, SOUND TEETH.

SARG'S

(1)

KALODONT

AN

AROMATIC CREAM

IN

COLLAPSIBLE TUBES.

RETAIL

1/-

EACH.

AGENTS—BARCLAY & SONS, LIMITED, 95 FARRINGTON STREET, E.C.

TIDMAN'S SPECIALITIES.

Readily Saleable by all Chemists and Druggists. 5 per cent. Discount for Cash.

		Price to the				Price to the	
		Retail at	Trade.			Retail at	Trade.
£5 orders carriage paid.		per doz 12/3		£5 orders carriage paid.		per doz. 5/0	
Tidman's Sea Salt, in Cardboard Packets	..	14d..	8/3	Wesley's Petroleum Pomade	..	1/0 ..	5/8
" " Linen Bags	..	1d..	"	" Carbolic Toilet Soap Tablets, in tinfol	..	2d..	1/6
" " 3-lb. Boxes	..	6d..	per doz. 5/4	" Coal Tar Soap	..	2d..	1/6
" " 7-lb. "	..	1/2 ..	10/9	" Carpet Soap	..	6d..	3/6
" " 14-lb. "	..	2/3 ..	19/9	" Furniture Polish	..	6d..	3/0
Tidman's Sea Soap, Tablets, in Boxes of 1 doz.	..	6d..	3/6	" " " " " "	..	1/0 ..	6/0
" Tooth Soap	..	6d..	3/6	" " " " " "	..	1d..	6d.
" Carbolic Tooth Powder	..	6d..	3/6	" " " " " "	..	3d..	1/6
" Cucumber and Glycerine	..	6d..	3/6	" " " " " "	..	6d..	3/0
" " " " " "	..	1/0 ..	7/0	" " " " " "	..	6d..	3/3
" Cucumber and Glycerine Soap, Boxes 1 doz.	..	4d..	2/6	" " " " " "	..	6d..	1/10
" Carbolic Disinfecting Powder, in Tins	..	6d..	3/6	" " " " " "	..	1/0 ..	7/0
" " " " " "	..	6d..	3/6	" " " " " "	..	6d..	3/6
Corn Solvent, 1 doz. on Card	..	2/4 ..	2/4	" " " " " "	..	1/0 ..	7/0
Tidman's Cucumber and Glycerine Jelly	..	6d..	3/6	" " " " " "	..	6d..	3/6
Wesley's Petroleum Pomade	..	6d..	3/0	" " " " " "	..	1/0 ..	7/0

TIDMAN & SON, 19 & 21 WILSON STREET, LONDON, E.C.

Also of Maw's, Newbery's, Barclay's, Sanger's, and the other Wholesale Houses.

HORN & SON

OFFICES FOR BRITISH AND FOREIGN

PATENTS AND TRADE MARKS,**SOMERSET CHAMBERS, 151 STRAND, LONDON**
(NEXT TO SOMERSET HOUSE).

Guide to New Patent Law and Registration gratis.

Contractors to H. M. Government and the Government of India.

Fletcher's Pino-Phenol Fluid Disinfectant, authorised by
H. M. Board of Trade.

Fletcher's Pale Carbolic Acid. 97-99 per cent.

Fletcher's Famous Fluid Sheep Dip.

35% 40-gallon Casks at Special Rates.

Fletcher's Carbolic Powders. 10 per cent. and 15 per cent.

* Before buying elsewhere write for prices and samples.

FLETCHER BROTHERS & CO., GRIMSBY, ENGLAND.**BERNARD-
ESCOFFIER FRIS,
GRASSE,**Oil of Almonds,
Perfumed Waters,
Lavenders, and all
Essential Oils.**LONDON DEPOT—
LOUIS****SELESINGER,
FINSBURY ST.,
LONDON E.C.****MUSK, CIVET,
AMBERGRIS,
TONGUE OIL,
OTTO OF ROSE,**and every
Essential OilTelegrams—
"AMBERGRIS LONDON"
Established 1854.**PRECIPITATED CHALK, WHITEST AND
PUREST.**CHEAPEST SELLERS IN THE MARKET.
ALSO CHEMICALS, DRUGS, AND OILS.TO
MUG. LEVERMORE & CO.,
8 LIME STREET LONDON, E.C.**MORISON'S PILLS,
POWDERS, AND OINTMENT.**

WHOLESALE—

33 EUSTON ROAD, LONDON.**BURN'S EMBROCATION**

The favourite rubbing for Athletes, Cyclists, and Sportsmen.

1/1, 2/9, and 4/6; 10, 24, and 40/ per dozen net
Of all London Wholesale Houses, or direct from**H. BURN, 7 to 9 Gresham St., LONDON, E.C.**
1 doz. 1/1 sent carriage paid in United Kingdom for P.O. 10/.**ELKANAH NATALI,
SHOPFITTER and GLASS SHOW-CASE MAKER,**

Removed to more Extensive Premises,

242 OLD ST. (only address),

Twelve doors from City Road, nearly opposite the old place.

A Large Stock of New and Second-hand Cases, &c., always in hand. No connection with any other house of the same name.

ESTABLISHED ABOUT QUARTER CENTURY.

BARTON'S EXTERMINATOR.

ONE SHILLING PER BOX.

Kills and Completely Dries up Rats or
Mice. Does Not Harm Dogs or Cats.
No Smell from the Dead Ones.**BARTON & CO., 28 LUDGATE HILL, E.C.**
THROUGH ALL THE WHOLESALE HOUSES.**S.V.R.** In 40-gallon returnable iron casks, pure tinned, with screw
bungs, interchangeable brass taps and spanners for open-
ing. Farina, Dextrose, Glucose, Alcohol absolute, Fuel
Oil, Pear Oil, Lime-Soda-Lend-Acetates, Verdigris, Acetic Acid, Wood
Naphtha, Charcoal, Ammonia liquid 880-500, anhydrous Sodium Sulphide,
Bromides, Iodides, Chloralhydrate, Boracic Acid, Sulphate of Copper,
Permanganate of Potash, Ol. Caryophyll., Menth. Pip., Feni, Juniperi.**HUGO LORENZ, 7 & 8 Idol Lane, LONDON, E.C.**
See Winter Issue, "Chemist and Druggist," page 120.**HUDSON'S HALF-MINUTE THERMOMETER,**
Inland Post Free, 3/6.CLINICAL THERMOMETERS IN CASES,
25/- per dozen. Trade Discount.

For Medical Press Opinions apply

HUDSON & CO.
OPTICIANS, PATENTERS, AND MANUFACTURERS,
5 Crosby Square, LONDON, E.C.**ALBERT J. TAYLOR & CO.****GUMS**

30 GREAT TOWER STREET, LONDON, E.C.

ARABICS specially offered: Varnish Gums
and Sandrac, Benzoin, Tragacanth, Myrrh,
Shellac, Goulard Resin, Glysterine, Cashu,
Senna, Aloe, Vanillins, Rhabarb, Honey,
Tamarinds, Chilies, Dragon's Blood.Enquiries Estimated.
Telegrams:—"Albert Taylor London."**E. OFTINGER,
3 Rue des Petites-Écuries, Paris,**

IMPORTER OF

MUSK, CIVET, AMBERGRIS,**OTTO OF ROSE, ESSENTIAL OILS,**

And all Products for Manufacturers of Perfumery.

HAND-PICKED GUM ARABIC.Wholesale and Export Druggists before buying elsewhere
should apply to**FREDK. FINK & CO.**

10 & 11 MINING LANE, LONDON, E.C.

SELL LIKE RIPE CHERRIES**TOM BROOKS'S SWEET SOLID PERFUMES**Six odours, everlasting and delicious; pronounced far and away best on
market. Retail 2d. each, Wholesale 12/ per gross, 1 gross Carriage Paid.
Special Offer.—A 2-dozen Box (assorted), as Sample, will be sent Post
Free on receipt of 2/. May be obtained of all Wholesale Houses.**TOM BROOKS, CHEMIST, HORNSEY, LONDON, N.****INDIANRUBBER STAMPS**

For all purposes and in all styles.

Self-Inking Stamps, as Illustration, from 2/ each.
Chemists' Prescription and Dating Stamps
of all kinds, Brass Seals for Wax, Stenella,
Dios, &c. Price and Pattern Sheets post free.**J. BERKLEY, 9 LIVERY ST., BIRMINGHAM.****POWELL & BARSTOW**(LATE W. HUBBARD & CO. ESTABLISHED 1830.)
Manufacturers, on the premises, to the Wholesale and Export Trade, of every
description of Elastic Gum.**SURGICAL INSTRUMENTS AND ELASTIC STOCKINGS,**
Catheters, Bougies, Zephagus Tubes, Horse Catheters, Ferguson's Glass
Speculums, Rectum Bougies, &c.**58 BLACKFRIARS ROAD, LONDON, S.E.**

SAMPLES AND PRICES ON APPLICATION.

EADE'S GOUT and RHEUMATIC PILLS

Are the safest and most effectual remedy advertised for
GOUT, RHEUMATISM, AND ALL MUSCULAR PAINS.
GEORGE EADE, 72 GOSWELL RD., E.C.
Counter Bills and Show Cards on application.



For Colds, Influenza
Hay Fever,
Catarrh, &c.
Of all Wholesale Houses, or
direct from Sole English
Depot,
A. P. BUSH & CO.
1 Gresham Buildings,
LONDON, E.C.
*SHOW CARDS, 6c., on
application.*

WM. JANCKE, ANTWERP, BELGIUM.

BICARBONATE OF SODA, BICARBONATE OF
POTASH, CAUSTIC POTASH, REFINED
CARBONATE OF POTASH, ALUM (LUMP).

PURE LIME JUICE

("IDRIS" BRAND).
This Juice is the first CLEAR pressings of SELECTED FRUIT in
specially-designed wooden presses, prepared according to our instructions,
and it will be found of a delicious fruity flavour, without the slightest
metallicness or bitterness, and fully 25 per cent. stronger in Citric Acid than
the usual brands of Lime Juice.

Samples sent free, with quotations for quantities and regular supplies.
Sole Importers, **ASCHAM ST., LONDON, N.W.**,
and Agents, **IDRIS & CO.,**



DENTISTS

Do you require good reliable up-to-date materials at
moderate prices? If so, drop us a line stating your require-
ments. PARAGON RUBBERS—Brown 8s., Orange (three
shades) 7/6, Best Pink 13/6, postage 3d.; try them, it
will pay you to do so. SPRINGS and SWIVELS,
2/6 doz. sets. Every requisite surgery or workroom.
Prompt dispatch.

ELLIOTT & CO., 30 Hanover St., EDINBURGH.



KOLA WINE, 3/6.
KOLA BITTERS, 3/6.
KOLATINA, or KOLA PASTE, 1/ 2, 3/6.
KOLA CHOCOLATE, 1/ 2, 3/6.
KOLA COCOA, 1/6, 2/6, and 5/6.
KOLA ELIXIR, 1/ 2, and 3/6.
KOLA CORDIAL, 2/6 and 4/6.
KOLA LOZENGES, 1/4, 2/6, and 4/6.
When ordering through Wholesale Houses, please specify "CHRISTY'S," as
ORIGINAL INTRODUCERS of ALL Kola preparations.
THOMAS CHRISTY & CO., 25 LIME STREET, LONDON, E.C.

SPONGE IMPORTERS.

M. PETERSON & CO.

(ESTABLISHED 1870),

75 ST. ANNE STREET, LIVERPOOL:

FOR HOME, FOREIGN, & COLONIAL MARKETS.

SUGAR OF MILK

(SYSTEM LANGEN). 1

Highly recommended by authorities. The
only make of perfect purity in all respects.



AGENTS—
BURROUGHS BROS.,
66 Basinghall St., London, E.C.

W. WATSON & SONS,

Manufacturers of HIGHEST CLASS

OPTICAL & PHOTOGRAPHIC INSTRUMENTS

(Established 1837) (To H. M. Government),
313 HIGH HOLBORN, LONDON,
251 SWANSTON STREET, MELBOURNE.

Steam Factories: 9, 10, 11, 16 & 17 Fulwood's Rents, London.

FOR PARTICULARS OF

W. WATSON & SONS'

OPTICAL & PHOTOGRAPHIC INSTRUMENTS

See pp. 22 & 23 CHEMISTS' & DRUGGISTS' DIARY, 1892.

Illustrated Catalogues Free on application.

Awarded 27 Gold and other Medals at International Exhibitions.

313 High Holborn, London; 251 Swanston St., Melbourne.

S. SAINSBURY'S

From English Lavender
Flowers, and most choice
and delicate essences.

Lavender

176 & 177 STRAND, LONDON.

Established 1839.

Wholesale and Shipping terms on application.

Water.

HASELTINE'S

For the Relief of Lumbago
Rheumatism, Sciatica, &c.

PATENT ANTI-LUMBAGO

NON-ELECTRIC

Generates and retains a natural heat in the body and
imparts full vital action to the nerves and muscles.

BELT.

ADDRESS—190 COMMERCIAL ROAD, PORTSMOUTH.

BRITISH AND FOREIGN

TRADE MARKS & DESIGNS REGISTERED.

ADVICE and FULL PARTICULARS FREE from

J. B. FLEURET, 22 GLASSHOUSE STREET, LONDON.

Oppositions conducted and defended. Searches made.
PATENTS NEGOTIATED.

ESTABLISHED 1833.

HORSES.—LIEUT. JAMES'S BLISTER.

CAUTION.

The annexed Label is at
the top of every Pot of
the ORIGINAL and only
GENUINE BLISTER.



The Messrs. Barclay & Sons,
95 Farringdon Street, London,
and Messrs. Raimes & Co.,
Edinburgh, are now and have
been Agents 57 years.

AGENTS—Sutton & Co., 10 Bow Churchyard; W. Edwards & Son,
157 Queen Victoria Street; Newbery & Son, 37 Newgate Street; Evans,
Lescher & Evans, Bartholomew Close; Burgey, Burdicks & Co.,
16 Coleman Street; Lynch & Co., 171A Aldersgate Street; Southall
Brothers and Barclay, Birmingham; R. Heywood & Sons, 33 & 35 City
Road, Finsbury; Sanger & Son, 150 Oxford Street; Millard & Sons,
40 Charterhouse Square; Corry & Soper, Shad Thames; A. A. Campbell,
Leadenhall Street, London; Woolley, Sons & Co., 69 Market Street, Man-
chester; Apothecaries Company, Virginia St., Glasgow; John Thompson,
58 Hanover Street, Liverpool; Boileau & Co., Bride Street, Dublin;
McMaster & Co., 121 & 122 Chapel Street, Dublin; Clarke & McMillen,
Victoria Street, Belfast; D. Galbraith, Londonderry; M. C. Delacoe,
Pharmacie Andrieux, Brussels.

And by all Chemists, in Pots, 1/6, 2/6, 5/9, 9/1, and 16/1.

COLONIAL AGENTS—MELBOURNE and WELLINGTON: Felton
Grinwade & Co.; SYDNEY, BRISBANE, and LAUNCESTON: Elliott Bros. &
Co.; DUNEDIN and AUCKLAND: Kempthorne, Prosser & Co.; CALCUTTA:
Smith, Stanistreet & Co.
W. H. JAMES, SOLE MANUFACTURER, FARINGDON, BERKS.
Advertised in "The Life" 54 years. Beware of Spurious Imitations.

20 HIGHEST AWARDS.

Pears' Soap

Soap Makers
by Appointment to



H.R.H.
The Prince of Wales.

RETAIL PRICES.

6d.	SIZE, unscented	-	-	-	Per Dozen.	4s.
1s.	„	all shapes, Washing or Shaving				8s.
1s. 6d.	„	Ditto	ditto			12s.
2s. 6d.	„	(The Washing Tablets are perfumed with Otto of Roses)				20s.

WHOLESALE PRICES.

TRANSPARENT
GLYCERINE

2s. per Box of 3 Tablets 16s. Per dozen Boxes.

DISCOUNT of 20 per Cent.
On all ORDERS of NOT LESS than **£5.**

(GROSS TRADE-PRICE VALUE.)

If accompanied by Remittance,

[Lesser Quantities 15 per Cent. Discount only.]

IMPORTANT STATEMENT.

No Dealer in the Kingdom, "Wholesale or Retail," for any quantity whatever obtains more than the above **20 PER CENT.** Discount.

(Signed), *A & A Pears*

71-75, NEW OXFORD STREET, LONDON, W.C.

OLDFIELD, PATTINSON & CO.

Concentrated Infusions

Fluid Extracts.

Concentrated Decoctions.

Solid Extracts.

Concentrated Liquors.

Fruit Essences.

Concentrated Essences.

Inspissated Juices.

Concentrated Waters.

Soluble Essences.

Concentrated Extracts.

Extract of Herbs.

Coated Pills.

Composition Essence.

Malt Extract.

Vegetable Colours, &c.

DRUGS IN
ORIGINAL PACKAGES
AS IMPORTED.

PERSIAN
BOUQUET
AND
LOZENGES

SPECIAL TERMS
TO
LARGE BUYERS.

Inquiries should state quantities.

Cucumber
AND
Glycerine Cream
IN
BULK & BOTTLED.

PRICE LIST WILL BE FORWARDED ON RECEIPT OF BUSINESS CARD.

MANUFACTURING CHEMISTS, WHOLESALE AND EXPORT DRUGGISTS, IMPORTERS of ESSENTIAL, OLIVE, and COD LIVER OILS.

SOLE PROPRIETORS AND MANUFACTURERS OF THE

"SILVER CHURN" DAIRY PREPARATIONS.

Butter Colouring.

GLASS BOTTLES.. 6d., 1/., 2/., 5/ Retail.
4/., 8/., 16/., 38/ per dozen.
BULK 1/ per lb. 100/ cwt. in 2 gallon Bottles.
90/ in 1-cwt. Kegs. 85/ in 3-cwt. Barrels.

Butter Powder and Preserver.

BOXES 6d., 1/., 2/., 5/ Retail.
4/., 8/., 16/., 38/ per dozen.
BULK 1/ per lb. 84/ cwt. in cwt. Kegs.

Essence of Rennet,

For Junkets, Curds and Whey,
Cheese Cakes, &c., &c.

GLASS BOTTLES.. 6d., 1/., 2/., 5/ Retail.
4/., 8/., 16/., 38/ per dozen.
BULK 1/ per lb. 10d. in 2-gallon Bottles.

Liquid Annatto, or Cheese Colouring.

STONE BOTTLES. 6d., 1/., 2/., 5/ Retail.
4/., 8/., 16/., 38/ per dozen.
BULK 1/ per lb.. 10d. in 2-gallon Bottles.
84/ in 12 gallons. 80/ in 3-cwt. casks.

Cheese Rennet,

OF

SPECIAL STRENGTH.

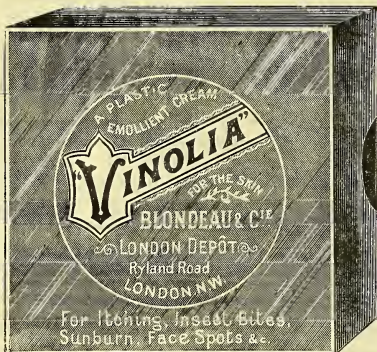
STONE BOTTLES.. 4-pints, 9d. Retail. 7/ doz.
Pints, 1/3 " 12/ "
Quarts, 2/ " 20/ "
1-gall., 4/ " 36/ "
1-gall., 8 " 72/ "

BULK. At Special Prices. Inquiries should state quantity.

These Goods are selling well in the Agricultural districts. They are very attractively got up, are superior to any foreign makes, and are well worth the attention of the Trade, as they leave a good margin to the seller.

Attractive Show Cards and Printed Matter may be had on application.

17 TODD STREET, MANCHESTER.



THE CHOICEST OF CREAMS

For the Skin in Health and Disease.

"For acne spots on the face, and particularly for eczema, it is undoubtedly efficacious, frequently healing eruptions and removing pimples in a few days. It relieves itching at once."—*The Baby*.

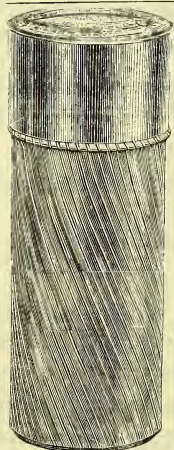
1/9, 3/6, and 6/- per Box.



A SOLUBLE, SILKEN, ROSE DUSTING POWDER.

"Superseding the old toilet powders, which are apt to cause acne spots on the face by blocking up the pores of the skin."—*Lady's Pictorial*.

1/9, 3/6, and 6/- per box, in Pink, White and Cream Tints.



In Fluted Silver Metal Cases.

1/-, 1/6, and 2/6.



Yields a most soothing substantial lather, and does not dull the razor or irritate and eat into the skin. In Silver Metal Boxes.

Toilet, 2/-; Vestal, 4/6.



In Collapsible Tubes.
Toilet, 1/6; Vestal, 2/6.

"VINOLIA" SOAP.—PREMIER (for the Million), 4d.; FLORAL, 6d.; BALSAMIC (Medical), 8d.; OTTO (Toilet), 10d.; and VESTAL, 2/6 per Tablet.

"VINOLIA" POMADE.—(Natural to the Hair and Scalp) in elegant porcelain vase, 5/6.

"VINOLIA" DENTIFRICE.—English, 2/6; American, 1/6; LYPSYL (a coralline emollient for the Lips), 6d. and 1/- per case.

BLONDEAU ET CIE., RYLAND ROAD, LONDON, N.W.
American Depot—73 and 75 WATTS STREET, NEW YORK.